

IMPORTANT TO LEAD SMELTERS.—The INVENTOR is PREPARED TO CONSTRUCT, upon liberal terms, a DOUBLE REVERBERATORY FURNACE, capable of making a SAVING of 50 per cent. FUEL over that of the best constructed furnaces in Europe; at the same time guaranteeing the general loss in smelting not to exceed 5 per cent.

The inventor, after 20 years' experience, both in England and various parts of the Continent, has discovered the method, in the regular course of smelting, and without any extra cost, of separating antimony from a certain class of silvery-lead ore, thereby rendering the lead free of all impurities, and, at the same time, the antimony in a marketable state.—All applications to be addressed to the inventor, Mr. ALFRED JENKIN, Eym, near Bakewell, Derbyshire. One of the furnaces will be at work by the end of the present month. A descriptive notice of the invention appeared in the *Mining Journal* of July 14.

TWO ARCHITECTS, SLATE MERCHANTS, BUILDERS, AND OTHERS.—The DIRECTORS of the MACINTOSH SLATE AND SLAB COMPANY having completed their arrangements for the REMOVAL of their SHIPPING PORT to CONWAY, for the convenience of vessels unable to lower their masts to pass the tubular bridge, are now PREPARED TO RECEIVE ORDERS for their justly celebrated SLATES and SLATES, from the Ffestiniog vein, which for beauty of colour and durability are unequalled.

The slabs have been largely used in the construction of houses for Australia; and, from the facility with which they are erected and removed, are well adapted for movable huts for men and horses at the proposed camps in England and Ireland.

All applications to be addressed to Mr. T. H. WHEELER, the resident director, at the company's offices, Conway, North Wales.

MERCANTILE, MINING, & AGRICULTURAL LABORATORY, CONDUCTED BY W. CROWDER, F.C.S., CONSULTING AND ANALYTICAL CHEMIST, 104, SIDE, NEWCASTLE-ON-TYNE.

Late Lecturer on Chemistry in the Newcastle College of Medicine, and formerly Assistant in the Laboratory of the Highland and Agricultural Society.

Mr. W. Crowder begs to inform such persons as are connected with Mercantile, Mining, or Agricultural pursuits, that he will be happy to perform ANALYSES and ASSAYS of every description, and to be CONSULTED upon subjects pertaining to SCIENTIFIC CHEMISTRY. A limited number of PRIVATE PUPILS are admitted to the laboratory on the following terms:—

Fee for 12 months' course of instruction, in one payment in advance... £20 0 0

Fee for 3 months, payment in advance... 6 0 0

ASSAYING.—CITY SCHOOL OF CHEMISTRY AND ASSAY OFFICE, DUNNING'S ALLEY, BISHOPS-GATE STREET WITHOUT. Conducted by JOHN MITCHELL, F.C.S., Author of *Manual of Practical Assaying*, *Manual of Agricultural Analysis*, *Treatise on the Adulteration of Food*, *Metallurgical Papers*, &c. ASSAYS and ANALYSES of MINERALS, METALS, and every manufacturing product.

SPECIAL INSTRUCTION IN ASSAYING and CHEMISTRY for gentlemen intending to proceed to the colonies.

Will shortly be published, **NOTES ON THE MINING DISTRICTS OF THE UNITED KINGDOM.** By J. W. ARDRELL, Esq.

No. 1. CORNWALL. Part I.

The following are in preparation, and will appear serially:—

No. 2. DEVONSHIRE.

No. 3. CORNWALL. Part II.

No. 4. DERBYSHIRE.

No. 5. CORNWALL. Part III.

No. 6. CARLISLE AND MONTGOMERY.

No. 7. CORNWALL. Part IV.

No. 8. FLINTSHIRE.

The districts treated of in succeeding numbers will be announced in due course.

FUEL AND ITS APPLICATIONS. Now ready, New Edition, in 2 vols. 8vo., cloth, beautifully illustrated, price 36s. (post free).

CHEMICAL TECHNOLOGY, or CHEMISTRY IN ITS APPLICATIONS TO THE ARTS AND MANUFACTURES. By KNAPP, ROSOLDS, and RICHARDSON. Vol. I., in 2 Parts (Fuel and its Applications), illustrated with 433 Engravings and Six Plates.

Vols. II. and III. of the CHEMICAL TECHNOLOGY contain Glass, Pottery, Flour, Sugar, &c. Illustrated with 433 Engravings and Ten Plates. Price £1 1s. and £1 2s. per vol. (post free).

London: Hippolyte Ballière, publisher, 219, Regent-street; and 290, Broadway, New York, U.S.

Just published, in One Volume, demy 8vo., 110 pages, illustrated by Twenty-two Maps, Diagrams, &c.

FOUR LECTURES ON GEOLOGY AND MINING. Read at Leeds, Hull, Bradford, Harrogate, &c. By GEO. HENWOOD, M.E. Forming a complete compendium of these subjects. Dedicated, by permission, to Sir CHARLES LEMON, Bart., F.R.S., F.G.S., President of the Royal Cornwall Polytechnic Society, &c.

Published (for the author) at the *Mining Journal* office, 26, Fleet-street, London. Price, handsomely bound in cloth lettered, 2s. 6d.; by post, 3s.

NEW PATENT ACT, 1852.—Mr. CAMPIN, having advocated Patent Law Reform before the Government and Legislature, and in the pages of the *Mining Journal*, &c., is now READY TO ADVISE and ASSIST INVENTORS in OBTAINING PATENTS, &c., under the NEW ACT.

The Circular of Information, gratis, on application to the Patent Office and Designs' Registry, 156, Strand.

THE ENGINEER, AND JOURNAL OF MANUFACTURES AND MACHINERY.

Whilst almost every class in society, and every section of industrial art, has its representative in the newspaper press, it is a matter of surprise that the engineers and machinists of this kingdom—a body that is not only more intelligent, more influential, and the well-being of which is more intimately linked with the advancement and progress of the nation—should be left entirely without an organ peculiarly their own, and exclusively devoted to their interests. To supply this desideratum, the *ENGINEER* is projected.

The *ENGINEER* (the size of the *Illustrated News*) will be published weekly, and the first number will appear on Saturday, the 17th of November.

It is not considered necessary to enter into lengthened preliminary details. The *ENGINEER* will be conducted by practical men, and they desire that their journal shall be judged, not by their promises, but upon its own merits, and be dealt with accordingly. Suffice it to say that it will contain all the information interesting to the mechanic and the man of science. This will comprise a List and General Description of all the Patents taken out and specified during the week, with illustrations of the more important; Reports of the Scientific Societies; the Papers of the Institutes and Society of Arts, the latest Discoveries in Mechanics and Science generally, abroad as well as at home; Reviews of Scientific Works, Reports from the Manufacturing Districts, &c. The *ENGINEER* will also provide an adequate and appropriate medium of intercommunication between scientific and mechanical men—a means of correspondence of which they have hitherto been destitute; and in this department the conductors pledge themselves to an undeviating impartiality. As an advertising medium it will be unique.

The price will be 6d. each copy, or stamped, to go free by post, at the following subscription:—Quarterly, 7s. 6d.; Half-yearly, 15s.; Yearly, £1 10s.

Suggestions, offers of assistance, and letters generally, to be addressed to the editors. Post-office orders payable to Mr. HENRY LUXTON, publisher, *ENGINEER* office, 301, Strand.

THE MECHANICS' MAGAZINE (published every Saturday, price 3d., stamped 4d., and in monthly parts) contains, in addition to a mass of interesting matter on scientific subjects, the SUBSTANCE of EVERY PATENTED INVENTION, together with all other current information concerning patents.

Messrs. ROBERTSON, BROSSEMAN, and CO. (Editors of the *Mechanics' Magazine*, established in 1823) UNDERTAKE THE PROSECUTION OF PATENTS for the United Kingdom and all Foreign Countries, and the transaction generally of all business relating to patents and the registration of designs.

Printed instructions supplied gratis on application. Costs of provisional protection, £10 10s.

Mechanics' Magazine and Patent Office, 160, Fleet-street, London.

TO INVENTORS AND MANUFACTURERS.—The "SCIENTIFIC AMERICAN" is the BEST and CHEAPEST WEEKLY PAPER FOR MECHANICS and INVENTORS. Each number is illustrated with from Five to Ten Original Engravings of New Mechanical Inventions; also, a List of American Patents; worth ten times the subscription price to every inventor. Terms, 11s. per annum.—Apply to AVERY, BELLFORD, GARDISAL, and CO., patent agents and negotiators, No. 32, Essex-street, Strand, London. Corresponding offices in Paris, Brussels, and New York.

THE MOST PRECIOUS DISCOVERY OF THE AGE!

NO MORE RHEUMATISM!—THE PAUSILLIPIC LOTION. For the SPEEDY CURE of acute Rheumatism, the most distressing Nervous Headache, Lumbago, Sciatica, Swollen Glands, Cramps, Rheumatic Pains in almost every part of the body, and many other complaints, by a few outward and painless applications to the part affected. A couple of days, in most cases, will suffice to completely cure the sufferer.

The number of testimonials in the hands of the proprietors, as to the almost marvellous effect of this wonderful remedy, is incredible. The following are a few of those recently received:—

TO MESSRS. FRANK NIEMEYER and CO.

July 30, 1855.—GENTLEMEN: I have used the Pausillipic Lotion as a means of relief for rheumatism in the shoulder, and sciatica in the hip; my suffering, especially from rheumatism, was extremely acute, and I found myself completely relieved by applying the lotion morning and evening for three consecutive days. I had to take no internal medicine, or to observe any particular regimen, neither was it necessary during the time to abandon my ordinary avocation. I consider it due to you, and feel induced in the interest of suffering humanity, to authorise the publication of these lines.

F. T. PORTER, Magistrate, Head Office, Dublin Police.

Victoria Park, Doneyearney, June 10, 1855.—GENTLEMEN: I feel extremely obliged to you for your very valuable rheumatic lotion, which I applied three times only, as directed, to my arm, when I was completely relieved from the very severe rheumatic pains which I had suffered incessantly for three months, and which I feared had become chronic. I do trust this most valuable discovery may be made available to the public.—I am, &c.,

THOMAS WELSH, late Attorney-General of Australia.

In bottles at 2s. 9d. and 4s. 6d., with ample directions for use.

Sold in London by Messrs. HIGGS, chemist, 35, Piccadilly, opposite St. James's Church; COLBERT and CO., 115, Cheapside; E. D. SHERIDAN, 50, Chiswell-street; W. WILKINSON, 53, St. Margaret's-hill, Borough; in Dublin, by Messrs. BAXTER and EVANS, Sackville-street; in Australia, by Mr. HENRY L. DAVIS, Liverpool-street, Hobart Town; in America, by Mr. A. SKEWELLEN, Baltimore-street, Baltimore; and wholesale and retail at 10, High-street, Aldgate, where all orders will be punctually attended to.

F. NIEMEYER and CO. will forward a box containing twelve bottles of both sizes of the Pausillipic Lotion, free of carriage, to any part of the kingdom, on receipt of a post-office order for £3 6s. 6d.

SMOKE PREVENTION.

The question of smoke prevention is one that claims in the present day a large share of public attention, mainly on account of the excessive nuisance its unabated vigour creates. The question has assumed a more practical form in Leeds, Sheffield, in the St. Pancras district of London, and, doubtless, will shortly do so elsewhere. We may remark, however, from the reports which have been given of the proceedings at these various places, that smoke, as a nuisance, still remains unabated—indeed, in Sheffield, we are told, the smoke nuisance is as bad as ever.

It becomes the duty of a scientific and practical journal to bring prominently before its readers any scheme which may have for its object the amelioration or entire removal of any present evil, and we gladly notice any effort which may be made to fill the present void.

Amongst the numerous inventions of the present day, not a few are directed to the removal of smoke, and more lately amongst them a contrivance, which has now been some time in successful operation, and known as "Gardner's Patent Smoke Deflector." We will introduce the *modus operandi* by means of which the inventor arrives at so desirable an end as the removal of the unhealthy nuisance now so universally existing. We will first of all enquire, what are the points which are necessary in obtaining our object? What are those considerations existing between smoke manufacturers and smoke preventors to which we must attend? These appear to be threefold:—

1. The removal of the smoke nuisance, without any loss of fuel or serious interference with the ordinary fittings and accompaniments of furnaces.

2. The apparatus employed should be of a simple and economical construction, and should not be liable to derangement.

3. The apparatus should be of an independent character, so that assistance from the engine, and consequent loss of power, be not an accompaniment.

The two latter objections have sufficed to overthrow many schemes, otherwise practicable. The mere consumption of smoke, granted important as regards the removal of an extensive nuisance, is not the only point of importance to which manufacturers, and those consuming large quantities of coal in furnaces, should direct their attention; to them the question should be one of economy. We may take it, upon good authority, that under common arrangements a smoky chimney liberates at least one-third of the fuel supplied for heat-giving purposes. This one-third we must bear in mind in every respect the best and most valuable portion of the fuel. The consumption of this one-third would, therefore, in such cases effect a saving in coal alone of 30 per cent. of all the fuel employed. It is a fact, which must be patent to all, that if by any judicious means we can perfectly consume the whole of the fuel supplied to the furnace, and retain therein till it has effected its proper purpose that portion of the coal which would otherwise escape uselessly by the chimney, supposing the circumstances required for such a condition be fulfilled, the amount of heat which such escaping portion would give out during combustion must be computed as a direct and valuable saving of fuel. How vitally important a feature does this become! Not only do we remove smoke nuisance, itself of great moment, but we arrive at an equally important phase—viz., economy, and that on a most extensive scale.

Amongst the many contrivances, we must admire the simplicity of Mr. Gardner's arrangement. The patentee employs what he terms "deflecting plates," and by these the smoke is deflected in any desired direction, according to the nature of the furnace. The principle adopted by the patentee is the anything but novel mathematical theory of the angle of incidence being equal to the angle of deflection. We must give all credit, however, to the novel feature which the adaptation of this theory by Mr. Gardner presents. The smoke in its passage through the furnace is, in obedience to the above law, brought in contact with and through the heated fuel, and not till then is it allowed to pass to the after portion of the fire-grate; arrived there, it meets with a supply of pure atmospheric air, the latter being also kept at a necessary temperature, by means of a series of diaphragms, through which it passes, the result of the meeting being an immediate and perfect chemical union and combustion, by which not only does the patentee remove all visible products, but effects a saving, according to the results of his experiments, of 30 per cent.

This invention is free from the objection which in some cases has been found insurmountable; we allude to the injury which results from checking the draught through the fire. We are informed that in this particular Mr. Gardner's arrangement effects a decided improvement. The whole contrivance is of a most simple character, is self-dependent, may be fitted in a few days to any furnace, and is not liable to get out of order. The *Mechanics' Magazine* for Sept. 29 contains a very interesting notice of this contrivance, with a drawing and description, to which all interested may refer for those details we are unable to give here. The patentee has modifications for locomotives, for marine engines, and for common fires. We have not seen the apparatus in operation in these forms, but should the evidence on these points be as complete as that which has resulted from its application to stationary engine furnaces, we can appreciate the vast importance of the result. Our locomotives once enabled to burn coal and consume the smoke from that fuel, would be worked at a cost for fuel which, compared with coke, would effect a saving of itself sufficient to afford an ample dividend to shareholders. We may, without much fear of contradiction, ascribe the present depressed condition of railway stock to the enormous expenditure for fuel.

The consideration is important to war steamers, as well as those employed in commerce; to both the saving of stowage room would be considerable, while, in the case of war steamers, any strategical purpose would no longer be open to detection, which in many cases has occurred, from their movements being traced out and accompanied by the large column of black sooty vapour issuing from the funnel. Our space prevents our adding further particulars. All who may desire such can gain full information and means of observation from the patentee, Norfolk-street, Middesex Hospital. In the interim, models can be seen at the Inventors' Department of the Crystal Palace, and at the Polytechnic, Regent-street.

IRON MANUFACTURE—HOT AND COLD-BLAST.—The controversy between the correspondent of the *Star of Gwent*, under the signature of "Iron," and Mr. Truran, in reference to the hot and cold-blast, continues. "Iron" states that he differs from Mr. Truran in his assertion that the temperature of the air supplied for combustion has nothing to do with the ultimate temperature of the furnace at the zone of fusion. If, continues "Iron," a furnace is making mottled iron, with a given burden of coal, ore, and flux, the blast being heated to 250° Fahr., by rising that temperature to 550° Fahr., the furnace in a short time is found to produce grey iron. The increase of temperature is in this instance directly applied at the zone of fusion through the blast, thereby enabling a portion of the carbon which was previously burnt in the furnace to produce temperature, to act as a reducing agent, and to assist in the increased carbonisation of the iron. If, on the other hand, the cold-blast be substituted at 250°, we find the result is a production of white iron, which clearly shows the cold-blast has reduced the temperature. Mr. Truran contends that the temperature attained in any furnace depends upon the quantity of heat developed or communicated, and the rapidity or slowness with which this heat is absorbed by the surrounding media. That a lower temperature necessarily prevails in the hot than in the cold-blast furnace, and that a burden of fuel and weight of blast is largely reduced, consequently a lesser quantity of heat is developed in the furnace. "Iron" asserts that the weight of the blast is not largely reduced, although it was increased by heating to nearly double its volume, it did not diminish its weight. Now, if it were reduced, the result must be a diminished production of iron; whereas we find in practice that the application of hot-blast, with a proportionately diminished burden of fuel, augments the make. The chilling effects of the cold-blast is clearly shown by a production of a "dark tuyere" in cold-blast furnaces. This "dark tuyere" is not produced in hot-blast furnaces, because the zone of fusion is more extended, which prevents its formation. The doctrine of "repeated re-actions," "Iron" contends, is not the "nonsense" which Mr. Truran designates that theory to be; although he adds, that to say that re-action takes place more than once is tantamount to asserting that the ore is deoxygenated and oxygenated several times in its descent. "Iron" does not imply that he could thus have interpreted it; for when the first layer of iron is deoxygenated by the oxide of carbon, it is converted into metallic iron, and, of course, descends at once into the hearth, and the resulting carbonic acid, passing upwards through the incandescent carbon of the fuel, combines with as much carbon as it already possesses, and is, therefore, converted into oxide of carbon. Now, the first formed oxide of carbon has reduced its oxide of iron, the metal of which has passed down to the hearth; and the carbonic acid formed by the re-action has no power to reduce a second layer until it has passed through incandescent carbon, which converts it into oxide of car-

bon, and when so converted, "Iron" maintains that it will reduce a portion of the succeeding layer, provided it is surrounded by a sufficient temperature, and it is only when the temperature becomes limited that this repeated re-action ceases. "Iron" concludes by stating that, owing to the higher temperature, and consequent facility for repeated re-actions taking place in the hot-blast over that of the cold-blast furnace, a larger proportion of carbon combines with the oxygen of the ore, without ever reaching the tuyeres, and hence the increased make of iron may be accounted for, and the superior yield of fuel.

ON THE MERIDIONAL AND SYMMETRICAL STRUCTURE OF THE GLOBE—ITS SUPERFICIAL CHANGES, AND THE POLARITY OF ALL TERRESTRIAL OPERATIONS.—No. IV.

(Read at the British Association meeting, Glasgow.)

BY EVAN HOPKINS, C.E., F.G.S.

THE CURRENTS OF THE OCEAN.—I shall now proceed to notice another general phenomenon, which has reference to the poles; it has been somewhat neglected by scientific men, although well known to mariners. I refer to the great movements of the oceanic currents from south to north. To those who have not been much on the ocean, and who are not accustomed to nautical language, the expressions of "going up," or of "going down," in the middle of the sea would sound strange. For instance, captains sailing on the Pacific would say, on leaving Panama, they were "going up" to Chili and New Zealand, and "down" to California, because the currents of that ocean are constantly running from the south to the north. Hence the cause of the expressions, sailing up against the stream, or down with it. Again, in the Atlantic we find the general flow of the ocean from the south, and the stream may be traced from Cape Hope to the gulf stream, and thence to the coast of Norway to the polar basin. Whatever drops in the ocean in the southern zone, if not checked in its course, and if preserved floating, will finally be carried to the northern regions. These oceanic streams appear to be propelled by impulses from the south polar basin, first as rings of periodical waves, then expanding out until they reach the continents and islands, when they become divided into various streams, and follow the configurations of the different coasts. In some places they expand and flatten down, as in the Pacific, and at others become dammed, and form high tides, such as those on the coast of Persia. It would occupy too much time to describe their various courses on their way to the northern region. Inland seas are not exposed to the action of these southern streams, consequently they have no tides; neither are there any perceptible tides in the Mediterranean, the Baltic, nor much in the Caribbean Seas. It is only those seas that are open and exposed to the southern current that are subjected to tides. This will show how very inapplicable the common theory of the tides is to the actual tidal movements of the ocean, and how very incorrect the knowledge of the tides must have been when such a theory was first propounded and accepted; yet such inconsistent doctrines are still propagated by professors of astronomy and physical geography. It is very important that we should have a more correct knowledge of the currents and the tides than we have had, and some idea of the laws that govern them. Indeed, it is by the increased knowledge on these important subjects which has been acquired by mariners, and which are recorded in the practical sailing books, that circular sailing has been of late years so much followed, and such quick passages made to and from the Antipodes. The records of observations are our only guides in all these questions, and not the theories which have been propounded by our predecessors. Having now pointed out these phenomena of action from the south pole to the north, we shall next proceed to trace their consequence in the form and character of the dry lands.

SEDIMENTARY DEPOSITS.—We shall now enter into questions more immediately connected with geological researches, in which there is much discordance, and almost insurmountable difficulties, in reducing the discoveries of the ancient organic productions into one consistent system. The frequent new discoveries of organic remains, and the subdivision of sedimentary beds into distinct eras of long periods of time, &c., instead of advancing our science, appear to retard it, causing continual changes of a retrograding nature, and leaving the great surrounding horizon darker than ever. Most important facts are constantly opposed, sometimes for many years, simply because they happen to be contrary to the doctrines which might be in fashion. Thus, our earth may become actually girded by the practical application of the observed law of magnetism, for the benefit of national intercourse; practical chemistry applied in our manufactures, and also in aid of agricultural industry; our minerals discovered, and converted into new purposes of life; our ships remodelled, and the course of our circumnavigation changed; in a word, the whole of our industrial science may proceed centuries in advance of what are improperly called the theories of science, which are pertinaciously kept behind, instead of progressing and aiding us in the march of improvements and discoveries. In commencing the geological enquiry of the sedimentary beds, we shall first notice the question of the universality of the different geological formations. Amongst the various theories promulgated by geologists, none have given rise to greater discussions more than the one which maintains that the entire surface of the globe has been covered by separate and consecutive concentric layers, enclosing distinct races of organic remains.

The bad effects of this erroneous doctrine is still felt, inasmuch as many persons believe that the earth is universally so covered, and that the sedimentary deposits, and the order of the organic kingdom, are precisely the same in the southern hemisphere as they are found in the north. The fact is, the only rocks that can be considered as universal are the crystalline rocks, i.e., the granites and the schists, which I have already noticed. As regards the sedimentary rocks, from the oldest to the most recent, they are only found very partially, and are necessarily extremely local, as shown in the accompanying maps. A mere glance at a geological coloured globe will show how insignificant is the extent of the area of the carboniferous formation, as compared to the entire surface; the same may be said of every other division of the sedimentary series, from the lowest to the highest.

The limits and breaks which have been assigned to our local formations have not been found to hold good in other regions. It has been found that, between the demarcation laid down, certain fossils of the lower beds extend higher up into those above, whilst some of those in the overlying formation are found extending downwards into beds of an older period. This gradual transition of one variety of fossiliferous beds into another is rather the rule than the exception, and is a *veraxa questio* between two distinguished geologists, and must continue to be so whilst any attempts are made to separate the Silurian system from the Cambrian by their organic contents. The whole formation belongs to one organic system from the old red sandstone down to the primary rocks.

These minute subdivisions of beds have caused considerable injury to the progress of geological science, and it is much to be regretted that more importance has been given to these trivial subdivisions of beds and their fossils than to the great outline and physical condition of the earth.

In the northern hemisphere, both in Europe and North America, they are much more developed than in the south, and the series of beds are characterised by organic remains of different climes—of the south temperate and tropics in succession; but the sedimentary deposits of the southern hemisphere are neither so numerous nor compact, and their organic contents in general bear strong analogy to those now existing in that region, without a trace of organic remains belonging exclusively to the north. Were this most important fact better known, and attended to by geologists, they would be much more guarded in their generalisations; and, in order to prepare the reader to form a correct opinion on the subject, and to remove at once the idea of the existence of the same kind of sedimentary rocks over all parts of the world as those we find in Europe or the northern hemisphere, we shall begin to describe them from the south—First, in the south temperate; secondly, torrid; thirdly, north temperate; and finally, in the arctic region; then conclude in showing that the shape of the continents and their organic remains have all been produced by the various movements of the sea and the lands from south to north, and that all these operations are still going on.

ALUMINA IN SOAPSTONE.—The Rev. Samuel Houghton, on a late tour in Cornwall, had occasion to examine the serpentine porphyry at Kynance Cove and Gne Grasse. In the porphyry there are only traces of alumina to be found; at those places the serpentine is traversed by dykes of granite, and the soapstone lies spread out in sheets at the junction of the serpentine and granite. He, therefore, considers the soapstone to be the result of the contact of these rocks at a high temperature, the serpentine giving the magnesia, and the felspar of the granite supplying a sufficient quantity of alumina to form the soapstone. The result of analysis of soapstone at Kynance gave—silica, 42.47; alumina, 6.65; magnesia, 28.83; water, 19.37; making a total of 97.32. That from Gne Grasse did not materially differ. Mr. Houghton differs both from Dr. Boase and Sir Henry De la Beche: he does not consider it diallage, as they did, but altogether of serpentine.

THE CORNISH SCHOOL OF MINES.

a new shaft sunk on the Goleen lode by Capt. Hosking, from which some ore was taken, but not to value. If Mr. Foley wishes to be considered "a miner," he must prove Capt. Matthew Francis's professional opinion to be worthless, or otherwise rest satisfied with his blushing title.—Oct. 18.

FREDERICK LUCAS.

THE CORNISH SCHOOL OF MINES.

Sir,—It is really quite amusing to see the perfect horror and dread with which some of your readers appear to regard the “differential and integral calculus.” Perhaps a more intimate acquaintance with it, and a knowledge of its many excellent qualities, would diminish their fears, and render them less hostile to it.

I beg to assure the Engineer "who writes from "Hayle," that no one has a greater respect for the practical skill and eminent abilities of the principal Cornish engine manufacturers than myself; but I certainly think, nevertheless, that the more they know of the sciences connected with their profession, the better engines they will manufacture. There is no greater obstacle to *practical* improvements than the fanatical prejudice of the men, who are too apt to believe that they have already attained. We have a remarkable instance of the danger of this overweening confidence in even the great Watt himself, who pronounced the engine erected at Horland, in 1798, to be perfect, and that further improvements could not be expected. This engine was then reported as giving a "duty" of 27,000,000. In twenty years afterwards, the best engine gave an average duty of 40,000,000; and in forty years it was about 50,000,000. The most successful construction of the present day, however, by the practical engineer is that which is afforded by the objections of Smeaton and Stewart to the use of the crank and fly-wheel.

If the "Hayle" engineer wishes to learn of what practical use the "integral calculus" is to the engine-maker, I cannot do better than refer him to the work already so often referred to on this point—viz., Pambour. The work of this French writer is often referred to, because there is no book in the English language which goes so fully and satisfactorily into all the scientific and practical questions relating to the steam-engine. I may take this opportunity of remarking (in reference to the last letter of the pseudo "Coal Miner"), that if he had read Pambour, or knew anything at all about the matter, he could never have made the absurd observation which he has done, as to the "use made of the "integral calculus" by that author. He has used this calculus in establishing his *fundamental equations*, on which the *whole* of his subsequent calculations entirely depend. "Coal Miner" might just as well have said that Euclid had only used the Fourth Proposition of his *Geometry* "on one page;" or, that the subject of Addition only occupied a very small part of works on arithmetic; and, therefore, neither Addition nor the Fourth Proposition of Euclid are of much use.

THE CORNISH SCHOOL OF MINES.

Reference was made by Mr. Patterson to Weisbach's *Mechanics*. Since writing my reply to him, I have met with the following remarks on that work, in a review of it which appeared in the *Mechanics Magazine* for November 20, 1847:—"We regret exceedingly to have been obliged to speak in terms so unfavourable of this work. . . . Either it is a course of mechanics and engineering better than anything of the sort in the English language, or it is a course of elementary mechanics, and one of the best of native production, and which ought, therefore, to supersede all others in our colleges and schools; or it is a work which, in its style and arrangement, is well translated at all into our mother tongue. We cannot possibly, in the face of the blunders, errors, and defects which we have shown to pervade it, say that it is a work of the former character; and it follows, of necessity that it must fall under the latter category."—*Quero*, Oct. 15.

—ALFRED W. HOBSON.

THE CORNISH SCHOOL OF MINES.

SIR,—The directors of the Cornish School of Mines may be zealous and enthusiastic in their efforts to teach mathematics and philosophy—they may be in possession of the best intentions to benefit the working miners of the West; but certainly they have not taken the best course to convince the public that they are actuated by such good motives, and it is to be feared they have not always followed the wisest councils, nor adopted the surest plans, to secure the objects which they contemplate. What will the public infer from the following quotation from the letters of Mr. Hobson, who, it is fair to presume, is the organ of the directors?

1. "Now, it is the object of the mining school to give all the requisite instruction to every class of persons connected with the mines—to mining engineers, as well as to assayers, mine agents, working miners, &c. It is, in fact, a general school of practical science; and whether the pupil be intended for an engineer, or an assayer, or a mine agent, or a schoolmaster, it is hoped that he may find a suitable education in the Cornish School of Mines at Truro." What a wonderful place this Cornish School of Mines is, to be sure; there appears to be nothing too difficult for it to accomplish.

2. "The school is not intended (as some appear to fancy) merely for working miners, to whom I grant that much of our course is unsuitable."

Now, I appeal fearlessly to the judgment of every unbiased reader of this Journal whether the first quotation leaves the second to be determined by the indefinite rules of fancy? Does not the first quotation explicitly state, in the plainest possible language, that the School of Mines is established for the purpose of teaching working miners, and that the course is unsuitable for the contrary? Is to be believed that the interested public will enquire minutely into the various purposes and capabilities of this Cornish School of Mines, is it to teach young gentlemen to inspect the various branches of industry scientifically, and thereby engraft the art of labour upon science? If so, then I may remind its promoters that, however strong and healthy the stock of science may become, labour will not grow nor flourish upon it. Is it, as it should be, to teach the working men science and its manifold advantages, and thereby engraft science upon labour? If so, the directors of the Mining School of Cornwall will have to be satisfied that they will obtain, to the gratitude and admiration of all right-minded, thinking men.

From what has transpired, it is not likely that the public will conclude that the prizes, exhibitions to Jermyn-street, and fitness for all situations in life, are no more than expensive baits held forth with the view of catching the more substantial offerings, and that the prizes are paid out of the pockets of the public. The prizes are paid and maintained by the charity of the Government and well-disposed individuals under the alluring impression of educating the working miners and their children? These are questions, in the solution of which the public are most intensely interested, and on which I may possibly have a little more to say next week, in a brief notice of the report to the ironmasters and colliery proprietors, by the

BRISTOL-GAZETTE, 16th JAN. 1854. SAM. MINEY.

TREBARVAH MINING COMPANY. ✕

Sir,—The "Two Shareholders" who have reported the proceedings of the last general meeting in your Journal of Sept. 29, seem to entertain the opinion that the notices of transactions in mining affairs should contain a particular account of the speeches, conversation, assertions, denials, acts, words, and all other matters and things that occur or take place at a mining association. Now, Sir, however gratifying such practice might be to the personal vanity of those persons who find a

TREBARVAH MINING COMPANY.

speech-making, and surrounding everything they mean to say with a certain copious loquacity, we are of opinion that it would be far from useful to adventurers or the mining public. Such a course, too, is quite unusual; and we are sure that your knowledge of the subject will confirm the statement, that it is only the abstract reports, solutions, and the reports and accounts, that are for the most part inserted in mining cost-books, and circulated amongst shareholders in the notices of proceedings. If, however, a report of all things is to be given, it should convey the truth only—neither more nor less. It should record facts, not "convey impressions." It should express the exact idea which the speaker intends fully and completely, and not merely something that resembles it, and with nothing more than is intended. Now for the amateur reporters who have pretended to record the proceedings of the shareholders in this company on the 29th Sept. have adhered to these conditions, or are not qualified for the duty they have volunteered to perform, we shall now consider; first observing, however, that your correspondents seem to possess as singular, or as convenient, knowledge of location as they do of reporting, particularly in your yielding to the influence of the "editorial" staff, and the "editorial" staff, and the "editorial" staff. Perhaps this specious verbosity is merely intended to amuse your readers; but we must confess that it has caused great work for our "eyes and ears," and that the high-sounding words of "juxta contrast" has, notwithstanding great efforts of imagination, still left us in the unpleasant uncertainty of being able to affix no meaning at all to the amateurs' report, or to affix almost any meaning that we please.

We may, too, ask the gentlemen, who contend for full and faithful reports, whether they can reconcile with their consciences the garbled statement which they give as a digest of the office report, and whether the words "for anything that appears to the contrary," "best thanks" and "not best thanks," have not been introduced by themselves to mislead and prejudice the minds of your readers?

We must pass over as unimportant the trifling and follies about the time of the meeting, the contention for a full attendance, and come to Mr. Buris' statement, as to receiving the company's ore bills, correspondence with the purser, &c. To this there really did not appear in our minds any satisfactory explanation. It is true that Mr. Buris made something like the statement set forth, but the facts turned out, upon investigation, very different. It appeared that Mr. Buris undertook to borrow for the company \$200, on his own responsibility, and that he had secured the money (apparently by borrowing from the bank) and was about to hand it over to the purser, for the repayment of the money. It appeared, however, that Mr. Buris failed to borrow for, or to lend to, the company on his own responsibility the \$200., or any other sum; and yet, notwithstanding such failure, it appeared that Mr. Buris received the ore bills. It also appeared that two members of the committee, finding that Mr. Buris' personal application for a loan had failed, jointly signed a letter to the purser, requesting him to pay the cost, and authorizing him to repay himself from the ore bills, and this was done. Under these circumstances it was that Mr. Libri complained that Mr. Buris had no right or authority to receive monies belonging to the company, and that the purser committed a great dereliction of duty in forwarding the money to him.

During the trial, the chairman said that if the notes had been followed, of sending a letter in the names of the committee to the bankers, the required advance would have been made, but that Mr. Buris preferred his personal responsibility. The statement made in the report, that "the Trebarhau account was looked at, and the names of the committee enquired after," was not made, in our recollection, at the meeting, nor do we think Mr. Buris wishes it to be so understood. His friend who reports him forgets that he was a member of the committee. The Chairman stated that he had never seen, and knew nothing about, the letter of Mr. Stokes. The bankers' book was not referred to to prove that the letter was not sent to any banker. The only copy of the letter is before us, but Mr. Buris' statement. The Chairman stated that the ore bills could not have been transmitted to the secretary, and passed through the cost-book. The Chairman did not say that Captain Osborne was lazy, or not half his time on the mine; but the Chairman did say, in reply to Mr. Buris' notions of "absurdity," that driving a level at a 4 f.m. interval was bad mining, and that it had been discontinued because Captain Phillips had condemned the operation. As to the shaft and levels, we heard nothing of the kind, and think that it is a correction of the notes of the reporters. There was no division on the resolution for dispensing with Captain Osborne's services, and the report says that the committee gave a general vote of censure, and a great injustice, in saying that they carried the resolution. The Chairman stated that the reasons which had been mentioned to him for dispensing with the pursers' services were, that he was too much in the habit of corresponding and giving exclusive information to one of the committee; that he had committed a great dereliction of duty in remitting ore bills to an individual member of the committee, instead of the authorised officer; that the merchants' bills for July were not yet up, although the meeting was held in the month of September; and that he had failed to advise the shareholders of the state of the surface arrangements, particularly with regard to the level, and that he had considered the matter. The Chairman said that, although not strictly within his duty, would have received his attention; as also the unmining-like operation of driving a level at a 4 f.m. interval.

The Chairman did not say that he never voted on an equal division when he could carry the object by other means; he said he declined to vote at all on the question, as it involved personal consideration. Perhaps, Sir, with these corrections, and the statement that the resolutions were carried by 260 shares against 60, and that six shareholders, representing in person and proxy 400 shares, waited until the termin-

~~+~~ SPECULATING IN MINES.

A GREAT MINING PROTECTIONIST SOCIETY.

GREAT WHEEL BUSY UNITED.

g I particularly wish for, which is for the prom
to any reserve free shares. If they have not, w

SOUTH TAMAR MINE AND ITS MANAGEMENT

Balance from last account	£ 289	5	3
Loan	1900	0	0
Ores sold	6895	6	4 = £9084
Expenditure from July to October	6831	3	3

Showing a profit for the quarter of only £64 3 1
And yet a dividend of 5s. per share on 9000 shares was declared, amounting to 2250/-
Now, Sir, having a deep interest in everything connected with legitimate mining,
I wish to enquire, through the medium of your excellent Journal, what is meant by

of our correspondent, as the least objectionable subject, and which appears to have

Wheal Wrey is, I think, very congenial to the defined north and south lode be found.

SOUTH ROBERT AND SORTRIDGE UNITED.

LADY BERTHA.

th in such a practice being p
n for addressing you upon

For myself, I have not faith in such a practice being pursued, although I am aware it has been. My only reason for addressing you upon this matter is to endeavour to obtain from the secretary a public refutation or explanation of his conduct. I have ever been against secretaries juggling in shares, and maintain that the grossest acts

of injustice result to the general body of shareholders, when the paid servants of the company are allowed to deal in shares.
I await the secretary's reply, when I will furnish you with some information relative to the foregoing testimonial to whom? Bah!
Oct. 15. A SHAREHOLDER.

CALSTOCK UNITED.

Sir,—I noticed in Capt. Cooke's report, last week, that they were driving south, to cut Old Harrowbarrow lode. Will he tell me how far it is driven south of the engine-shaft? Old Harrowbarrow lode dips north. I think I saw some remarks from Mr. Ennor a few months since, stating that the lode they are driving to cut dips south, and but few know the district better than he does—consequently, I have no doubt he can give valuable information as to the results of the mine. Is the counter lode they speak of the cross lode seen in the adit, dipping west? Sir, by calling on the miner to prove what he has time to time sends for insertion to your widely-spread and impartial Journal induces Mr. Ennor, and others of your able correspondents, to come out, and from them we gather valuable information. It is only for the miner to study Mr. Ennor's remarks on practical mining, and he would have no occasion to go to Truro to School.—*East Harrogate, Oct. 17.*
JAMES STEPHENS.

THE OSO GOLD MINE, CALIFORNIA.

Sir,—I see in the Journal for Oct. 6, that a Mr. George Tate has unwittingly realised the old aphorism, that two negatives make an affirmative, when he condemned the Oso Mine, and confessed his utter ignorance of it, with an amiable consistency. He had, too, the meanness to make of the Oso a peg whereon to hang his profound expectations. How immensely tall, Sir, some people appear to be when mounted upon a ladder—that is, supposing you do not see the said ladder. But our George Tate tells us in his unique "report," that he has under him Mr. Bray, an amusing propinquity—Mr. Meig, Mr. Kam, and Capt. Trengrove, Dr. Collyer, &c., in *esse*. With such a consummate phalanx George Tate must be elevated, and can have no difficulty in persuading himself that he is, or will some day be, a great man. I should not be surprised if his next worthy exploit were what he teaches us to expect—his endeavour to transmute the Alps into solid gold, and that, too, "on the diagonal principle." We shall be able to estimate the degree of honour, too, that may be found in George Tate; for when Dr. Collyer reaches the anticipated location he can inform George Tate of much of California (the learned doctor was well known and highly esteemed there), and much, too, about the Oso Gold Mine; and also that some 50,000 lb. worth of gold was gotten out of the same Oso ground in about four months. We shall see if Mr. George Tate's honour can prompt him to make the *amende honorable* when he learns these most interesting facts.
W. EATHORNE GILL.
Totnes, Oct. 16.

AUSTRALIAN CORDILLERA.

Sir,—By an advertisement in the columns of this week's Journal, the poor dupes will see they have an opportunity of meeting together on Monday at 12 o'clock precisely. This "manufactured to order" bubble came out under "cost-book" in Oct. 1852, and in the same month was admitted on the Stock Exchange, for which the committee are much to be censured, as they knew only 23,333 shares were paid on, and these even are known to have been taken up by a few notorious individuals for "rigging" purposes. It was stated to the said committee that 24,000 were reserved for the purchase of the Seghebo estate, belonging to the Australian Consols Gold Mining Company, another "bird of a feather," but were not to be handed over till it had been inspected. This great bargain never came off, as a good title could not be shown. Were any of these shares sold in the great gold fever of Dec. 1852 at a large premium? No meeting has ever been called, or a balance-sheet published. I have no doubt every shilling of our funds have been made away with, and that we shall never divide a penny per share. In order to show I am serious, I will wager 10/- even (the 10/- to be given to the Hospital for Consumption at Brompton) that this affair will turn out a total loss, like the Ave Maria, New South Wales Gold, Chartered Australian Land, Albion Gold, Australian Mutual. A dividend even of a farthing shall make me lose the bet. Will no one accept the challenge? I am not wedded to any particular charity, and stipulate only that the winner shall have the choice. The Chairman has gone through the Bankruptcy Court, and is now absent from London. His schedule showed a loss of 1200/- by these shares. In conjunction with Messrs. Duppas, Martin, and Bennett (directors also of the Australian Mutual), and Mr. Towne, opposed last November Messrs. Capel, Jemel, &c., with the latter's own money, in Chancery, when they petitioned to wind-up. Mr. Towne now says that his solicitor is in communication with gentlemen of the Stock Exchange. Let them all come to the meeting, and explain, if they can, for matters have at present a very ugly appearance. The office is shut up, and the books, which could a tale unfold, are illegally made away with. It has been suggested to me to apply to the Queen's Bench for information.
Brighton, Oct. 18. H. GUEBALLA.

AVE MARIA.

Sir,—Messrs. Parker and Squires are requested, with the other members of the investigating committee, to send for publication to the Mining Journal the balance-sheet, as they have now had the figures before them for a twelvemonth. If they do not accede to this, but one conclusion can be drawn, which shall speedily be put in print, unless satisfactory explanations are given. My enormous expenses, and the time I have "cut to waste," has determined me not to be frustrated any longer. Mr. Burge, the only responsible director, ought not to be allowed to escape scot free under a well-planned cross fire.—*Brighton, Oct. 18.*
H. GUEBALLA.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

WHEAT JULIAN TIN MINE (SLOUGH).—This sett, which was noticed in our Journal a short time since, as having just been put to work, has been visited this week by several parties. The old Gunnis, for 4 m. wide, is thought by old timers, will pay well for stamps' work. The present party (only two—Mr. D. H. Skewis, of Beccleston, and Mr. John Sims, of Calstock) have cleared up about the size of the shaft on the north part of the Gunnis, and came down upon excellent branches of tin and tin-stuff all over the size of the shaft. A shaft is sinking to the north of this, to take the lode at 20 fms. deep; and about 70 fms. to the east of this they have cleared up on the south part of the Gunnis, where, for about 3 fms. wide, it is worth at least 1000 lb. per fathom. There has been nothing done here before by any party for several hundred years.

RELISTIAN MINE (GWYNNEP).—This sett is taken up by an influential party, who intend working the western part of the sett, where the lodes are in whole ground (excepting one bit of ancient workings), and near the Herland Mines. In exploring the sett, three of the Relistian lodes have been cut, and a counter; the latter is believed to be the Clowance counter, which, on intersection, has always made deposits of ores. It contains fine sprigs of copper, even in the costean pit where it was first cut.

IVYBRIDGE MINE.—The new 50-inch engine will go to work about the second week in November, at which period a general meeting of the adventurers will take place. The mine is progressing most satisfactorily.

BORINGDON CONSOLS.—This mine having been inspected for a shareholder by Capt. Williams, of Yolland Consols, the following is a copy of his report:—"I find Annie's shaft sunk 70 fms. under the surface, and at this point, 16 fathoms south, stands a large clay-course, with which the lode, in its downward course, forms a junction, and this I consider a very favourable feature in the mine, as likely to cause the lode to be productive. But in order to see the lode out of the immediate influence of the elvan, I would suggest that the shaft be sunk 3 or 4 fms. deeper before the cross-cut be commenced towards the lode, or otherwise it may be found in disorder. The 15, under the adit, is driven out of the shaft about 220 fms., and the lode generally is large and strong, and has produced some very fine bunched lead, but is at present poor. Near the eastern end a counter lode has been intersected, which produces a small portion of the black oxide of copper, with mundle, but is not of much value in itself, in my opinion. Some men are employed in driving north to intersect this lode at another point, between two cross-roads, and, although there can be no objection to this operation, I would rather see the men driving on the course of the counter lode, south-east towards the three side lodes which are known to exist in that direction. As it is probable that the intersection of these lodes by the counter would be attended with good results, this operation strongly recommends being carried out, as the east and west lodes referred to are traversed by a very favourable piece of ground. The 24, under the adit, has been driven east about 90 fms., and at 40 fms. from the shaft a good bunch of ore was found, which dipped towards the shaft 10 fms. from the 12 to the 24; consequently at the next level it will not be more than 20 fms. from the shaft, or perhaps less. This bunch of ore is visible in the bottom of the 24, but cannot be conveniently taken away, in consequence of the water."

GREAT WHEAT BUSY UNITED MINING COMPANY (LIMITED).—It is now only a few weeks since steps were taken to form a company for working the mines respectively known as Wheat Busy, New, Old, and North Hallenbeagle, and Wheat Daniel, and extending over a surface of nearly two square miles, the property of Viscount Palmouth, at the liberal dues of 1-24th. A lease has been duly drawn up and signed by the lessees, the counterpart of which will be in their hands in a few days, and at an early date the operations of the mines will be energetically resumed. The success that has attended the promoters at so early a date may be attributed to the almost universal opinion of all competent miners and mining capitalists, as to the value of the property, which is not surpassed by any tract of unwrought mineral ground in either Cornwall or Devon, and to this may be added what may be called a new feature, both in the mining and also in the commercial world—the application of the new Limited Liability Act, this being the first mining company formed under its auspices. I would further remark that Cornwall is not slow in adopting its principles, although it can and does boast of the Cost-book System, which in itself, is plain and safe, but the departure from its first principles has entailed ruin and dismay to many; still, in consequence of the carelessness, inability, or design of co-adventurers have been pounced upon by creditors for debts which have been allowed to accumulate far beyond the value of the mine and plant thereon. From the risk of such things there was no escape, hence the utter dislike of capitalists to join in undertakings, however promising, to be worked under the Cost-book System. We need not say a word in favour of this undertaking itself, simply because the property is so well known as to need no comment or commendation from me, for the bare mention of the fact that in about 18 years the lord received from Wheat Busy dues to the amount of 17,000 lb. is enough, and that since the engine ceased working upwards of 12,000 tons of copper ore have been returned from these mines, besides a large quantity of tin, the proceeds of the refuse, and the back of the adit level. There is no lack of capital, even in these trying times, to work a good mining property; the only difficulty is to get confidence, founded upon the principles of safety and limitation, and who, with that fact before them, would not invest their 500/-, 1000/-, or 1000/-, with the chance, nay, almost the certainty, of receiving 20 or 30 per cent. per annum.

GLAMORGANSHIRE.—Mr. Thos. Glover will submit for sale, by auction, on Saturday next, a valuable and extensive mineral property: it is divided into 20 lots, and includes veins and seams of coals and culm, as well opened as unopened. The mines are situated in the parish of Llancarfan, the town of Swansea, the parishes of St. John's, Juxta-Swansea, Swansea, Llanrhidian, Ilston, Llanguicke, and Longher. The quality of some of the coal is represented to be anthracite, of the best description, whilst in other portions of the estate it is highly bituminous.

POLZARATH CONSOLS MINES.—The whole of the machinery and materials of these mines will be sold, by auction, on Thursday next, under Deerees of the Stannaries Court. The machinery includes a 17-in. cylinder double-acting steam-engine.

EAST POLGOOTH MINE.—Mr. Gumme sold, by auction, on Wednesday last, the remaining machinery and materials on this mine. The lots include a 30-in. cylinder pumping-engine, 9 feet stroke in the shaft, the whole of the account-house furniture, &c. We will give the total amount the sale realised in our next Journal.

At Silver Brook Mine, R. Payne was killed by a fall of rock.

Meetings of Mining Companies.

GREAT HEWAS UNITED MINING COMPANY.

A special meeting of shareholders was held on Thursday, to consider the propriety of amending the cost-book, by inserting a clause or clauses, empowering the committee or shareholders to forfeit shares on non-payment of calls, and passing such resolutions as may be necessary to carry the same into effect. To consider the financial position of the company, and, if necessary, to make a call, and also to receive the report of the committee on proceedings taken against the company, and to take the instructions of the meeting thereon.

Mr. PEARSON in the chair.

Mr. EMERSON (the secretary) having read the notice convening the meeting, Mr. HANCOCK (the solicitor of the company) said he would read the resolution proposed to be added to the rules in the cost-book, to enable them to forfeit shares in arrears of call. It did not refer to those already made, but future calls. Mr. HANCOCK then read the following resolution:—

"That the cost-book rules of this adventure be altered and amended by the addition of the following rule thereto, which shall be inserted in the cost-book, and henceforth taken and deemed as one of the rules of the cost-book of this adventure, and be applicable to any call made at this or any subsequent meeting of the adventurers. It shall be in the power of the committee, and they are hereby authorised and empowered, to forfeit as and when they shall deem it expedient, all shares upon which any call shall remain unpaid, 21 days after becoming due and payable; and every such declared defaulter shall immediately and henceforth lose all right, title, interest, or share whatsoever, in or to the said forfeited shares, or in or to any monies, credits, or rights, minerals, machinery, or other property of this adventure that he or she might or would have been entitled to, either in law or equity, in virtue of such shares, previous to such declared forfeiture. Provided, nevertheless, that the committee shall have power to give time for payment of said calls, or restore such shares, if forfeited, on payment of such calls if they shall deem it expedient so to do. Provided also that every forfeiture of shares shall be confirmed at the next general or special general meeting, which shall have power to decide as to the disposal of such shares, and the transfer thereof."

A statement of accounts was submitted, of which the following is an abstract:—

Dr.—Balance at bankers	£ 862 3 8
Cash received on account of calls	196 10 0
Tin sold, August	525 14 5
Ditto, September	376 5 7 = £1960 13 8
Cr.—June cost	£ 525 14 5
July ditto	376 5 7
Mr. John Hodge	1000 0 0
Petty cash, &c.	33 0 0 = 1935 0 0
Balance at bankers	£ 25 13 8

The estimated account of assets and liabilities showed a balance in favour of the mine of £557. 7s. 4d.; but in this statement there are some items that will most probably prove bad debts.

The Chairman said the difficulties in which they were placed arose from having a great many shareholders merely nominal, and others who had kept back, and had not paid the calls. The mine was divided into 30,000 shares, and out of that number 20,000 had paid; but, according to the present rules, if it turned out well, they could come in and pay their 5s. or 6s. per share, and participate in the profits with those who had risked their capital. The only power they had under the present rules was to put the defaulters into the Stannaries Court, and perhaps get 1s. per share, which would be of little assistance in working the mine. The object of the proposed alteration was to get rid of the present nonentities, and endeavour to get good parties in, who would subscribe capital to prosecute the undertaking with vigour.

Mr. NICHOLLS wished to know whether the clause would be binding on defaulters? Mr. HANCOCK replied, it would not be binding upon calls already made, but those to be made in future, and, of course, future calls would not be received until the arrears were paid up.

Mr. WATDUCK opposed the forfeiture of shares, and contended that they had no right to confiscate any one's property. The shares, if sold, might fetch more than the call, and the balance ought to be handed over to the parties.

Mr. HANCOCK said the resolution he had drawn up would give more advantage to the defaulters than the method proposed by Mr. WATDUCK, the principle of which was not in accordance with the cost-book.

Mr. WATDUCK insisted that they had no right to confiscate the property of any party, and proposed a long resolution as an amendment, but, after a lengthened discussion, it was abandoned, in consequence of failing to find a second.

Mr. ELKAY said that, with regard to the new rule proposed, it related to the future rather than the past; and although 14 days were named, perhaps there might be no objection to alter it to 21 days, the only thing wished by the committee being to get rid of those shareholders who refused to pay the call, and were an incubus on the mine, as it necessarily followed that those defaulters prevented others from paying, from the fear that at some future day they should come in and participate with those who, by subscribing, had brought the mine to a successful result.

The Chairman then put the resolution as read by Mr. HANCOCK, after altering the 14 days to 21.

Mr. NICHOLLS seconded the resolution, which was carried unanimously. The Chairman said, the next subject was to consider the financial position of the company, and if necessary to make a call. The value of the machinery on the mine was about 5000/-, and the debts were not much above that amount, but they had no money in hand. Mr. Charles had been down to the mine, and, perhaps, they had better hear his statement upon the subject.

Mr. LELAND suggested that Capt. Webb's report should be first read.

Mr. EMERSON then read the following report:—

Oct. 17.—In the 56 and 66 fms. levels we are laying out a great extent of tin ground on the north lode, but it has required nearly the last two months in cutting out the lode, and putting the stopes in good working order. In the 36 fms. level also we are laying open plenty of tin ground, but it will require some two or three months to commence to the east ground. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes place about Northey's shaft, which proved very productive, and taken away by the former workers to the 86 fms. level. These intersections (and, no doubt, rich tin) will ever continue to accompany this shaft in depth. We have great facilities for sinking this to deeper levels, without waiting for the level to be cleared. We shall then have an immense piece of the north lode (45 fms. long and 36 fms. high) put in good order for taking away. The south and middle lodes at this time are not objects of our pursuit. Some of the upper stopes that have been at work from the back of the 36 fms. level, for the last two years, are rather falling off in produce, which must naturally be the case. The intersection of the north and the south lodes takes

The Rocky Bar Gold Mining Company have advices from Mr. Seyton, dated Grass Valley, California, Sept. 3:—"Since I wrote you on Aug. 13, the works have produced a small mine. The vein drift is about 64 ft. thick, and at present I have ceased from driving it further, as most of the water comes from that side; and for various other reasons, which I need not here detail, I deem it the best plan to exhaust the mine above our drift is over 86 ft. long, and is being run from both east and west drifts. Continued. I have 'stoped out' a quantity of ore. Of this 4½ tons have been crushed at the Gold Hill Mill, and yielded nearly \$60 per ton; and 40 tons were crushed at the French Hill mill, which yielded over \$70 per ton. The water at present is most under control (less in quantity), and the mine is in a better condition than when I last wrote you. The strain and work required by it, even in admirable condition. In short, call it good fortune, or what you will, the place where I have sunk my engine-shaft is the best on the hill; and if I am enabled to sink it 20 to 25 ft. deeper (my original intention), I have every reason to believe that the rock will be even richer than it is at the present level of the main drifts. The average thickness of the vein in the drifts is from 18 to 22 in., increasing as it descends. It varies from 10 in. to 48 in. I enclose account to date, and list of liabilities; the latter are diminishing rapidly. The assessment for the tenth day of the month, 25, I have just paid, and with regard to the assessment the board being in possession of sufficient facts to judge for themselves. I have no hope of being able to work till the rains set in—perhaps even during the whole winter; but on this point I cannot as yet speak with certainty." The secretary (Mr. Brennan) writes from New York, Oct. 2:—"The accounts show that 4½ tons, crushed at Gold Hill, yielded \$2476; 40 tons, crushed at French Mill, \$2857; that the claims against Mr. Seyton for work done in opening the mine, which stood at \$8608 on the 1st of Sept., were reduced to \$5185 on the 1st of Oct. The secretary has paid himself \$7000 out of arrears of pay due to him. The assessment which was recently levied to meet these liabilities and contemplated expenditure has yielded \$15,400, besides sums to be received from California."

Mining Correspondence.

BRITISH MINES.

ALFRED CONSOLS.—The lode in the 40, east of Field's engine-shaft, is from 4 to 5 ft. wide, worth for copper ore 30¢ per fm.; the lode in the 130, east of this shaft, is worth for copper ore 30¢ per fm.; the lode in the 80, at Davey's engine-shaft, is worth for copper ore 30¢ per fm.; the lode in the 60, east of this shaft, is producing good stones of ore, but not sufficient to value; the lode in the winze sinking below the 60, at this shaft, is worth for copper ore 20¢ per fm. No change to notice in any other part of this mine since the last report.—M. WHITE: Oct. 15.

BEDFORD UNITED.—The lode in the 130 fm. level east is improving as we proceed in driving the end, and I hope soon to see a good lode here, which there is every appearance of at present; in this level west the lode is without alteration. The lode in the 115 fm. level, east and west, is producing a little saving work; the stones in the back of this level will yield about 8 tons of ore per fathom; we have a good ore lode in the winze sinking below the bottom of this level. In the 103 we are driving by the side of the lode. Jackson's stopes in this level are worth 6 tons of ore per fm. We continue to drive by the side of the lode in the 35 east. There is nothing new in any other part of the mine worthy of notice since last report.—J. PHILLIPS: Oct. 17.

BOLENOWE.—The levels are progressing satisfactorily, but without any material alteration in the lode since last report.—W. ROBERTS: Oct. 13.

BOTTLE HILL.—In the 123 cross-cut north we have not seen enough of the lode to report on it, but hope to be enabled to say something of its character in my next report. In the winze sinking below the 100 we are still raising some good work for tin. All the stopes in the mine are much the same as last reported. In the 12 west, on the north lode, the lode is 2 feet wide, and composed of gossan, and capels, with spots of tin intermixed, but not rich enough to save. In the 100 west, on the south lode, there is no change to notice.—J. GIFFORD: Oct. 17.

BRINTAIL.—Since I last reported on the new lode, on the 11th inst., we have, as I anticipated, reached the clay-slate formation, in which we have extended east on the course of the lode about 5 feet. First, the branch of ore was about 3 inches wide, solid; but, last evening, in taking down a piece of the lode which we had desued, it increased to an average width of 7 inches, which I compute to be worth at least 25¢ per fm. The lode is at present accompanied by a beautiful stratum, and is also emitting water, which I consider very favourable for a continuance of the ore. The stopes in the back of the 10 are still producing very good ore; the ground already stoped has been worth about 10¢ per fm. The still being now fixed, we have nothing to prevent us from working the back with greater facilities than we could possibly do before. We have now nearly 20 tons of ore at surface, and a parcel will be prepared for the market as quickly as possible. I believe the end is actually worth 5¢ per fm. more than I have estimated it at; still, I like to keep within bounds.—J. ROACH: Oct. 18.

BUTTERDON.—No portion of the lode has been taken down during the past week; therefore, I have no alteration to notice since mine of the 8th inst.—T. GREENFELD: Oct. 13.

CALSTOCK CONSOLS.—The men have commenced driving west on the new north lode; it can be seen for more than 4 feet in width against the cross-course, and is yielding rich copper ore. The south copper lode, driving on east, has improved very much this last week; it is now 20 inches wide in the upper part of the end, and is rich for copper ore for that size. There is no alteration to report in the stopes on the south lode.—W. B. COLLIER: Oct. 13.

CALSTOCK UNITED.—There is no alteration in the ends in the 60 since last report.—W. COOK: Oct. 13.

CAMBORNE CONSOLS.—In the 50 west, on Wheel Gons lode, the lode is 2 ft. wide, producing stones of good ore. The 33 cross-cut north is progressing favourably. Other bargains are without alteration.—W. ROBERTS: Oct. 13.

CAMDOR MAWR.—The stopes in back of the 5 fm. level are looking quite as well as when last reported, and yielding as much as we expected. The cross-cut in the bottom of the winze, under the 12, is very promising, and yesterday, I believe, we met the north side of the lode, and I entertain hopes, next week, of being able to give a favourable report. We have now two men trying the lode in various places. We are in daily expectation of receiving the findings for the ore sampled the beginning of last week.—J. WILLIAMS: Oct. 13.

CARRACK DEWS UNITED.—In the 30, east of Eley's shaft, the lode is 15 inches wide, producing tin, but not enough to value. In the 30 west the lode is 3½ ft. wide, and worth 7¢ per fm. In the 22 east the lode is 2 ft. wide, and worth about 3¢ per fathom. At Battery shaft, the lode continues slowly to improve; it is 2½ ft. wide, with copper ore throughout the whole of it, not enough to value, but it will pay for dressing. In the 30 east the lode is from 2 to 2½ ft. wide, intermixed with copper, worth (say) 30¢ per fathom. The stopes in the back of the 20, on the south lode, are 20 inches wide, worth 4¢ per fm. The mine is improving, and there is ore in every shaft and end, though some of them are not rich.—WM. HOLLOWAY, JR.; MARTIN DENN: Oct. 16.

CARVANALL.—The prospects of this mine continue to improve. In the 60 west the lode is 3 ft. wide, worth 40¢ per fm.—W. ROBERTS: Oct. 13.

CLIJAH AND WENTWORTH.—Julia Lode: The 20, driving east, is extended 65 fms., the lode yielding ½ ton of ore per fathom. The winze sinking below the 20 is sunk about 4 fms., the lode producing good stones of ore. The 30, driving east, is producing good stones of ore, and looks very promising. The winze sinking below the 30 is sunk about 7 fms., the lode worth 20¢ per fathom. The cross-cut driving north in the 30 is extended 25 fms., driving by six men, at 2¢ 10¢ per fathom. The cross-cut driving south in the 30 is extended about 40 fms.; driving by four men, at 4¢ per fathom. The 40, driving west, will yield 1½ ton of ore per fathom. The 40, driving east, is worth 15¢ per fathom; we have about 5 fms. more to drive to communicate with the winze sinking below the 30. The 50, driving east, will yield 1 ton of ore per fathom. The 50, driving west, will yield 1 ton of ore per fathom. Walter's engine-shaft is sunk about 7 ft. below the 50; sinking by nine men, at 20¢ per fathom.—Wentworth Lode: Boundary shaft is sunk about 7 feet below the 20, the lode producing good stones of yellow ore; sinking by six men, at 4¢ per fathom.—J. CUDDELL; C. GLASSON: Oct. 13.

CLOWANCE WOOD.—We are still driving towards the new engine-shaft. The ground in the adit cross-cut is without alteration.—J. DELBRIDGE; E. CHOWEN: Oct. 13.

CROW HILL.—We have driven the cross-cut 9 ft. this week, and the ground is still a beautiful blue clay. We have commenced sinking a new shaft, to the 35 level on the course of the lode, so as to have to the 35 level after we cut the lode in this lode, which will give ventilation, and enable us to open the lode at once.—Oct. 13.

CUBERT UNITED.—At Trebellan, the lode in the engine-shaft is 18 inches wide, composed of quartz and mudstone, producing some good stones of lead. The lode in the 60, north end, is 1½ ft. wide, composed of quartz, prisms, &c., worth from 1 to 2 cwt. of lead per fathom. The stopes in the back of this level, south of engine-shaft, are worth 6 cwt. of lead per fathom. The lode in the 66 end, south of engine-shaft, is 14 in. wide, composed of quartz, floukan, and mudstone, producing a little lead. The stopes in back of this level, north of the engine-shaft, are not so good for lead, worth from 10 to 12 cwt. per fathom. The lode in the 56 end, south of the winze, is 12 inches wide, composed of quartz, mudstone, and lead, worth for the latter 2 cwt. per fathom. The stopes in the back of this level, north of the engine-shaft, are worth 3 cwt. of lead per fathom. The lode in Towsey's shaft is 12 in. wide, composed of quartz, prisms, and mudstone—unproductive. We have begun to sink the winze below the 66, but no lode has been broken.—J. TREWIS: Oct. 13.

CWM DAREN.—In the 40, driving west of engine-shaft, the lode is about 5 feet wide, yielding good stones of copper ore, but not sufficient to state a value on. In the stopes in back of the 40, west of shaft, the lode is 4 ft. wide, yielding from 8¢ to 10¢ per fathom of good quality copper ore per fm. In the stopes in back of the 30, west of Morgan's winze, the lode has not been taken down, but the branch of copper ore to be seen in the end of the ground looks very promising.—A. WATERS: Oct. 15.

DAIKEN.—The stopes in Francis's level has not changed since last reported upon. The level has improved by driving west, and all the ore is worth keeping. The north lode, in Level Good, is improving much. Oliver's adit remains much the same, and the men are stoping ore in Hargreaves's level. We have driven through the cross-course, but our dressing is going on well, and we sample again the end of next week.—J. HARGREAVES: Oct. 15.

DEVON WHEAL DULLER.—I am glad to inform you that our mine, upon the whole, is looking well and improving. Engine-shaft: We shall complete the sinking of the shaft to the depth of 32 fms. this week. The length of the cross-cut to the lode will be about 6 fms., the driving of which I estimate will take about five weeks. During this time the men will be engaged casing and dividing the shaft. In the 20 west the lode is opening out, now about 3 ft. wide, with a quantity of water coming from the end; the lode here presents every appearance of an important improvement. The stopes in the back of this level produce 1½ ton of very good quality copper ore per fathom. The 20 east has been extended 20 fathoms, which has intersected the cross-course. The lode up to the cross-course has produced some fine work, equal to 1½ ton per fathom of rich copper ore. We have driven through the cross-course, but have not yet met with the lode on the eastern side. The western shaft is now sunk to a depth of 14 fms. from the surface, on the course of the lode, which is much the same as for some time past. Our dressing operations are progressing satisfactorily, and we are preparing for the next sampling a good parcel of fine ore.—W. NEILL: Oct. 16.

DRAKE WALLS.—The branches in the 70, east of Matthew's shaft, produce good work, and the ground of a very favourable character; the stopes in the back of this level are producing fair quality tinstuff. The branches in the 60 are producing saving work; the stopes in back of this level are producing good work. The branches in the 50 are tiny; there has been but little change in this level, either in the end or stopes, for some time past. The stopes in bottom of the 60, west of footway shaft, are producing good work, with favourable indications. The different points of operation in driving and stoping are progressing favourably.—T. GAZDAR: Oct. 11.

DYFNGWLL.—The 60 has been under water since Monday, Sept. 3. The weather has been so dry we have had no surface water to drive the winze, and the water in the mine rose some fathoms above the roof of the 40th level before the rain turned the wheel. During last week we had a fair supply of water, the rain increasing till yesterday, when we got the first autumn floods. The water to-day is 24 feet below the 40. I never saw the machinery work so well, or draw so much water, as at present; the wheel works eight strokes per minute. Our heaviest pumping work was in the 40, which has been driven double for a considerable length, and the lodes stoped for 15 feet in width. We shall now lower the water below the 50th faster. To-day some of our men commenced stoping in the back of the 50, and as the water clears from their barges they will resume their stopes and drivings. The 50 east has been driven 2 fms. 4 ft. 9 in. further north, yielding 3 tons to the fathom. The end shows a considerable improvement. The 60 west has been driven 3 fms. 5 ft. through a fine course of ore; this driving produced 4 tons of rich lead ore to the fathom. Both ends look exceedingly well, and indicate richer branches of ore before us. The winze below the 50 has been sunk 5 feet 8 in. lower, and cut into the roof of the 60, freely ventilating that most important part of the mine, and enabling us to put on at once 14 men at work. In the side of the winze 1 fm. of ground was stoped, to increase its size. The ground broken in the winze produced about 3 tons to the fathom. The 30 east has been driven 1 fm. further, through ore ground on north lode, producing a few cwt. to the fathom. The 50, west end, has been driven 4 ft. 4 in. further, through ore ground, which produced about 10 cwt. to the fathom, but when all the lode is taken down it will yield nearly 2 tons per fathom. On the side of the level, behind the driving, 4 fms. have been taken down, and have produced 25 cwt. per fathom, in addition to the yield in driving. In the back of the 30 west the three stopes have yielded good ore. The western stopes produced 45 cwt. per

fathom, the middle stopes 30 cwt., and the stopes next the winze 35 cwt. to the fathom; 29 fms. 1 ft. of ore ground were broken in these three stopes. In the 50 east 1 fm. 6 ft. 6 in. was risen through from the stopes into the north lode, and 8 fms. 4 ft. 8 in. of ore ground stoped in the latter lode, which will produce about 10 cwt. to the fathom. All the ground broken below the adit during the past two months was ore. In addition to the above work, we have, as previously intended, widened, for 90 fms., 1 ft. of the adit level. Now, this adit has not been far short of driving a new level for that length. The men broke so much stuff that we required 40 hands to tram it out some days. The railway is also removed from portion of the adit, and in a few days we shall have it all removed, and re-layed on the new part of the level; this will be giving the rods a separate and clear working compartment for themselves, and the rails laying on their own rocky way, instead of above the rods, as before. We have also cut a way for rails from the cart-road to the intended engine-house, for the purpose of tramping materials, &c. The foundation for the engine-house will be ready in a day or two, the position for which was approved of by the engineers. Our shipments of ore have been—Aug. 17, by the *Elizabeth and Mary*, 21 tons 2 cwt.; September 8, by *Prosperity*, 28 tons; now dressed of waste and slime, 4 tons; dressed last report, 7 tons = 46 tons 2 cwt. We have been five weeks without drawing any stuff. The lead dressers have been a part of that time dressing waste and slime. We shall in a day or two be able to draw from the 34 and 42, so as to enable them to commence dressing again. During the two months we have driven and stoped 50 fms. 2 ft. 5 in. of ground, which contains about 90 tons of lead ore. Our settings for October are—The 60 east to four men, to drive the level further; the 60 west to six men, ditto; four men to stop in the back; the 50 west to six men to drive the level further; the same level to stop in the back by six men; the same level to stop in the back by six men; ditto by six men, on south lode; ditto by four men, on north lode.—E. DAVIES: Oct. 8.

EAST BLACK CRAIG.—The pitch in the bottom of the 33 fm. level, between Nos. 3 and 4 cross-cuts, has improved this week. The pitch in the 33 south level is turning out about the same quantity of lead as the level did in driving. The pitch in the back of the 33 fm. level, between No. 1 cross-cut west and No. 1 cross-cut east, has improved a little this week. The other pitches are looking much the same as when last reported.—J. SMITHAM: Oct. 13.

EAST WHEAL GEORGE.—The 56 cross-cut south is progressing satisfactorily. We have not as yet any symptom of the lode. The ground in the cross-cut consists of a mixture of capel, killas, and quartz.—Oct. 13.

EAST WHEAL RUSSELL.—We are still driving the 66 on the south part of the lode, carrying some of the lode under the killas, it being too spare to drive all the end in; the part we have is composed of spar, capel, and gossan. The winze is still producing grey ore, but not rich. We have taken down more of the lode in the 55 cross-cut; the leader is not so rich as when last reported—it will make again; the lode is so spare to drive in, that we cannot make any great progress. As soon as we have room I intend to drive west a little, before we cross-cut further west towards Hitchens's shaft. I think we had better put two more men in the 55, to make six.—M. METHERELL: Oct. 18.

GEIFRON.—We started our wheel to-day, and it worked very well. The water will be out from Pearce's shaft by Monday, so that the men will be able to resume their work. I expect will take from 8 to 10 days to fork the water from Pearce's shaft, as we have a larger house of water than at Pearce's shaft, and our life is not quite so large.—Oct. 13.

GILMAR.—Michell's flat-rod shaft is down 7½ fms. below the 10; the branches are still very regular, but not rich for tin. The character of the ground shows good indications for improvement again shortly. The 10 cross-cut, north-west of the same shaft, is letting out an increase of water; we have about 2 fms. to reach the side branch. The deep adit is communicated to the winze reported on last week; this ground will be stoped as soon as the stamps is ready to receive the stuff. The deep adit level, east of Field's shaft, is still very kindly, and opening tin ground for stamping. At Field's shaft, sinking below the 10, we have two kindly branches, producing tin, and separate from any before wrought on in the mine. We have this day intersected a copper lode in this date to the north of the engine-shaft. The lode is 1½ ft. wide, and has not seen enough of its value to report on. The men are getting on satisfactorily with the engine-house, and hope to have it complete the time specified. Nothing else new to remark.—W. JONES; J. MORCOM: Oct. 13.

GREAT ONSLOW CONSOLS.—The lode in the 60 west is large, and spotted with ore. There is no material change in the stopes over the said level. In the 72 west we are still driving by the side of the lode. In the engine-shaft the ground is much the same as when last reported on. It is being sunk with all speed by 12 men.—G. RICHARD: Oct. 17.

GREAT SORTIDGE CONSOLS.—We have cut through the lode north in the 42 fm. level, and find it to be about 5 feet wide, the ground very easy for driving—in fact, we have commenced to drive both east and west. We intend to force on the eastern end as fast as possible, in order to reach the cross-course as soon as we can.—T. METHERELL: Oct. 18.

GREAT SOUTH TOLGUS.—Little has been done in the different levels in the past week, the men being engaged in altering the pitwork. The pitches throughout the mine are looking well.—J. DAW: Oct. 13.

GREAT WHEAL BADDERN.—The ground at the eastern engine-shaft is still very good, and the lode 2 feet wide, composed of mudstone and stones of lead. We are now down from 7 to 8 fms. below the 31 fm. level, and hope in about eight weeks from this date to get to the 61 fm. level. The lode in the 31 fm. level east is small at present, and the ground rather hard. The lode in the 31 fm. level west is 1½ ft. wide, producing more lead as we get west, but not rich at present; there will be a bunch of lead here soon. The stopes and tribute pitches are looking pretty well, also the 40 fm. level on the eastern caunter; this is a very promising lode at present. We have not been able to do anything to it for the past week for want of air, and unless some there are some artificial means used, or the dam taken out, we shall not be able to do much more in this part of the mine without another shaft. We are sinking a winze below the 30 fm. level east; the lode is small and unproductive, but I hope it will improve the ventilation. Our sampling will be considerably affected by means of the dam being put in. Since both engines have been put to work we have saved about a ton of coals per week.—J. ROOKES: Oct. 16.

GREAT WHEAL BUSY UNITED.—I worked here from a boy, until the mine ceased working. There is a course of copper ore in the bottom of the 90 fm. level, east of Chynoweth's shaft, 9 feet wide for scores of fathoms long. Twelve men can raise 100 tons per month of copper ore, besides tin, from this pit; and with a large stamps and crusher, all the lodes and the stuff now in the stilt underground will pay well to send up and dress; and there is enough stuff broken to pay for the erection of all proper machinery to the mine, draw the stuff, and crush the ores. Begin at the first level, and clear as you go.—J. NICHOLLS: Oct. 13.

GREAT WHEAL FORTUNE.—The ground in the 70 cross-cut, south from Harvey's engine-shaft, is much improved since last report. The lode in the 60, east from the above shaft, is 4 ft. wide, worth 15¢ per fm.; the backs over this level, east of the cross-cut, continue to look well. The lode in the 60 end west is 3 feet wide, worth from 13¢ to 15¢ per fm. for copper and tin. The south part of the lode in the 50, west of Copper-house shaft, is 4 ft. wide, worth 16¢ per fm.; the rise in the back of this level is much improved since last report. The 40 west is without much alteration since my last; the backs over this level continue to yield good average quality stamping work. The north lode in the 30, west of Trebleick's shaft, is 4 ft. wide, worth 10¢ per fm. Carnarvon lode in the adit end, west of Pascoe's shaft, is 3½ ft. wide, producing saving work for tin. The tribute department looks favourable.—S. S. NOBLE: Oct. 16.

GREAT WHEAL VOR.—No. 48. In the 70 fm. level, east of Crease's cross-cut, on Vreah lode, the lode is worth 30¢ per fathom. No. 57. At Goldworthy's shaft the lode is worth 10¢ per fathom. No. 53. In the 90 fm. level, east of Highburrow shaft, the lode is worth 45¢ per fathom. Treaceman's Lode: No. 48. In the 80 fm. level, east and west of Culin shaft, the lode is producing some rich work for tin, with a most promising appearance. No. 44. In the 20 fm. level, east of Woolf's caunter, the lode is worth 5¢ per fathom.—Wheal Metal: No. 51. In the winze in the bottom of the 40 fm. level, west of the shaft, the lode is worth 30¢ per fathom. No. 9. In the stopes east of No. 5 winze, in the bottom of the 50 fm. level, the lode is worth 30¢ per fathom. No. 37. The stopes in the back of the 60 fm. level, west of the shaft, are worth 20¢ per fathom. No. 6. The stopes in the back of the 60 fm. level, east of No. 6 winze, are worth 40¢ per fathom. No. 39. The stopes in the back of the 60 fm. level, west of No. 6 winze, are worth 18¢ per fm.

HAWKMOOR.—The lode in the eastern shaft is 18 in. wide, producing some good floors of ore, of good quality, and is gradually improving as we sink. In the 80 east we are driving on the side of the lode this week, and ground much as last reported, and the south wall very regular. The lode in the rise in the back of the 20 is 2½ ft. wide, worth 3 tons of ore per fathom. In the stopes in the back of the 30, west of the great cross-course, no lode has been taken down this week. The pitch west of old miners' shaft, is improved, and the other pitches are looking well.—J. RICHARDS: Oct. 13.

HEMERDON CONSOLS.—Woolcombe's engine-shaft is down 9 fms. 1 ft. below the 30 fm. level, without any change in the lode to notice. In the 30 west no lode has been taken down since my last report. The stopes in the back of the 30 fm. level are without any change to notice. In the 15 east the men have finished their stent, and we have thought proper to stop it for the present, so as to reduce the cost.—J. GIFFORD: Oct. 17.

HERWARD UNITED.—At Henblas workings, the rise over the 30 fm. level, on Bagshaw's vein, is at present poor for ore. In driving west on the rib of ore lately gone through in the rise, the yield has been about 15 cwt. per fm. There is a little rise in the rise on the vein about 3 fms. north from Bagshaw's vein, at times sufficient to pay for rising. At Roskell's cross, the pump sinking on Grainger's vein is now down about 4 fms., the first 2½ fms. of which has passed through fair tribute ground, but latterly the vein has been slipping off to the north; this is not at all an unusual occurrence with the best veins in the chert formation, and we hope in a fathom or so to have the vein rich, and better defined than we have yet seen it. We're shaft is down 16 fms. from surface. The price for sinking at present is 140¢ per fm. A few fathoms more will bring us into much speedier ground. Our setting-day for November month will be on Saturday next.—J. B. LINTHOLME: Oct. 18.

HINGSTON DOWN CONSOLS.—The lode in the 85, west of Morris's engine-shaft, is 4 ft. wide, and worth 4 tons of ore per fathom. In the same level, east of the said shaft, the lode is 4 feet wide, and worth 2 tons of ore per fathom. In the 85, east and west of Doidge's winze, the lode is large, but is at present of coarse quality. In the 75 east the lode is large, about 4 ft. wide, and carrying more ore than it has for some time past. The lode in the 65, east of Harris's winze, is for the present poor. In the 55 east the lode is very large, but at present not rich. The lode in the 65, east of Hitchens's shaft, is 5 feet wide, producing occasionally rich stones of grey and yellow copper ore. In the cross-cut in the 75 we have discovered a bed of fluor-spar, carrying excellent stones of ore, but the main part of the lode is not yet reached.—WILLIAM RICHARDS: Oct. 17.

HOLMBUSH.—In the 145, east of the diagonal shaft, the lode is intersected; it is small, but regular and well defined, and the ore of good quality, worth 15¢ per fm. The western stopes in the back of the 145 are producing 2 tons of ore per fm. The middle stopes are producing 2 tons of ore per fm. The eastern stopes are producing 1½ ton of ore per fm. In the 155 fm. level west the lode is 10 inches wide, composed of mudstone and spots of ore. The tribute pitches are without alteration.

IVYBRIDGE.—The lode in the 55 fm. level south is worth 30¢ per fathom—set to six men to drive, price 2¢ 15¢ per fathom, stented 5 fms. The 58 fm. level north is being cleared 50 fms. from the shaft, and we have now reached the whole ground—set to two men to drive, price 2¢ 7½¢ per fm., stented 4 fms. In the 48 fm. level north the lode is 4 feet wide, a very promising lode, carrying a little lead—set to four men to drive, price 2¢ 50¢ per fathom, stented 5 fms. The winze in the bottom of the 48 fm. level south is set to four men, price 4¢ 6¢ per fathom, to hole to the 55. The rise in the back of the 48 fm. level to new shaft by six men, price 9¢ per fathom, the north out. The pitch in the back of the 48 fm. level south is set to four men, price 1¢ 15¢ per ton. The pitch in the back of the 43 fm. level south is set to two men, price 4¢ 10¢ per ton. In the 43 fm. level south the lode is small, carrying a little lead—set to two men, price 3¢ per fathom, stented 2 fms. All the landing, by two men, price 5¢ per month. All the filling, by two men, price 5¢ per

month. The engineers are getting on with the new engine. The shaftmen are engaged putting in bearers and cistern, to receive the new pitwork at the new shaft. The dressing department is going on satisfactorily. We have about 36 tons of lead at surface.—JOHN CLIMO: Oct. 13.

LADY BERTHA.—The lode in the 10 east is 4 ft. wide, worth 5 tons of ore per fm. The lode in the 10 west is 2½ feet wide, worth from 2½ to 3 tons of ore per fathom. The winze in the meadow is 3 fms. deep, and the men progressing with the same satisfactorily. I am preparing a good pile of ore for our sampling, which is the best of mining reports. I am pleased to say our prospects are very cheering. The results will be seen from the sale of ore.—W. GOSS: Oct. 18.

LEEDS TOWN CONSOLS.—In the 40 fm. level the lode is 5 feet wide, hard and unproductive; the ground in the cross-cut, and also in the 30 south on the hookan, is much the same as when last reported; we hope to cut the caunter part of the lode in the latter during the next few weeks. There is no alteration in the lode at Eley's shaft; the ground is easier for sinking, and we expect to reach the 20 in about four or five weeks. The stopes in the back and bottom of the 10, at this shaft, are improving; the tribute pitches, on the other hand, are not looking quite so well. Mr. Sims is attaching eight additional heads to the stamps; I hope he will make them work effectively.—PETER PARSONS: Oct. 16.

LYDFORD CONSOLS.—Richards's engine-shaft is sinking very satisfactorily. In the 13 fm. level south the lode is 4 ft. wide, very kindly.—J. RICHARDS: Oct. 18.

MIXON GREAT CONSOLS.—Since last report we have sunk the engine-shaft sufficiently below the 73 fm. level to fix cistern, cut eastern pit, fixed cistern, and dropped another lift for sinking. We have lengthened the shaft pit for lodging ore stuff, and put in a penthouse, which is essentially necessary for the safety of the shaftmen. These men (twelve in number) are now fully employed in sinking this shaft. I am not aware of anything to retard our progress for the future, and we shall steadily pursue our work in this place with all vigour. The ground is still of that favourable character which leads us to expect something important. At the north underlay shaft, sinking below the 73 fm. level, we are also sinking with a full complement of men; the lode is about 2 feet wide, good work.—W. TREDEA: Oct. 18.

MOLLAND.—The pitch in the back of the 42 east is at present worth 8¢ per fm. The pitch in the back of the 30 east is worth 7¢ 10¢ per fm. At the eastern mine the lode at the shaft, sinking below the adit, is divided and heaved south, by the slide referred to in my last report. The ground is not hard for sinking; but as a pretty deal of water is issuing from the same, nearly all the ground through which we are now sinking requires to be timbered. The lode in the adit level, driving east, is full 3 ft. wide, producing, in the bottom part of the end, saving work, worth about 4¢ per fm. We have now a plentiful supply of surface water for all purposes.—T. BENNETT: Oct. 13.

NETHER HEATH.—The drift, driving west in the bottom of the limestone, is not so good, a slide having disordered the vein. The ore in the pit on the south side of the vein has nearly all been worked out, and some of the men have begun to work on the north; this looks well. The vein trial near the river side is very good; the vein is from 4 to 6 feet wide, carrying a leader of ore from 4 to 8 in. wide, with strong barrytes throughout. I think this will make a very important part of the mine. We expect to intersect another vein, about 20 fms. before us, on which nothing has been done. The new shed over the dressing-floors is completed, and found very beneficial. About 30 bins of ore are already dressed, and by the end of next week we expect it will be increased to 50 bins.—W. JEFFREY: Oct. 12.

NORTH DOWNS.—Although we have not yet cut the lode at John Michael's, we have cut a stream of water, and the old workings are draining, so that men will be appointed on Monday morning to clear the atle, and sink on the course of the lode, which work will be found essential, because the air in the cross-cut is scarcely enough to enable the men to work; this ground will soon be proved to be a very good one, and before this reaches you the engine-house will be felled to the ground.—J. PRINCE: Oct. 13.

NORTH FRANCES.—The lode in the 42 west is very much the same as it was last week. The new shaft, on Vernon's lode, is progressing very favourably, so is the shaft against the shaft. I hope we shall have before the end of the month.—P. HOSKIN: Oct. 13.

NORTH WHEAL BUSY.—The lode in Painter's engine-shaft, sinking below the 10 fm. level, is worth from 16¢ to 18¢ per fm.; it has improved in size and quality since my last report. The prospects at this point are very encouraging. The lode in the 10 end east is 14 in. wide, opening tribute ground; in the same level end west the lode is much the same as when last reported on. The lode in No. 1 stopes, in the back of the 10, is producing stones of good quality copper ore; stoping at 23¢ per fm. The lode in No. 2 stopes, in the back of the 10, is 2 ft. wide, worth 16¢ per fathom; stoping at 35¢ per fm. The lode in the winze sinking below the adit, east of No. 2 stopes, is 1 foot wide, worth 8¢ per fm.; sinking by six men, at 10¢ per fm. Of the whole, our prospects are daily improving.—S. S. NOBLE; J. W. CHASE: Oct. 17.

NORTH WHEAL ROBERT.—There has been no lode taken down in the trial shaft, in the western ground, this week, but the sinking is progressing favourably. The 30 end, driving east from this shaft, continues its size and promising appearance. The 30 end, driving west, is improving in width, being 7 ft. wide, producing good stones of ore, with every appearance of an improvement. The 20 end, driving west from this shaft, is looking well, producing good dressing work. The eastern part of the mine is looking very prosperous, and our machinery is in good working order.—A. FRYON: Oct. 17.

NORTH WHEAL TRELAWNY.—The men have resumed sinking Coryton's shaft under the 36 fm. level. The cross-cut in the 36 is extended west towards the lode 2 fms. The lode in the 25 fm. level, north of the shaft, is 2 feet wide, producing 3 cwt. of lead per fm. In the same level south it is 1½ ft. wide, producing 2 cwt. of lead per fm. In the 13 north it is 2 ft. wide, producing good stones of lead, and is at present disordered by a slide. We have resumed driving the cross-cut in the 13 fm. level east towards Wheel Wreyl's shaft. The stopes and pitches are producing much as usual.—H. HODGE; H. HARVEY: Oct. 18.

OKEL TOR.—The lode in the bottom of the 20 fm. level has improved for copper. The shaftmen are now engaged cutting the pit in the 35 fm. level, preparatory to altering the pitwork, and commencing sinking. In the cross-cut south in the 35 to the south copper lode, the ground is mixed up with capel, and is getting wetter. By the end of this month we hope to communicate the rise from the 20 to the 35 level, which will ventilate this part of the mine. We have been obliged to suspend the 35 east for the present, until the 20 is ventilated.—W. B. COLLIER: Oct. 13.

OLD TREWETHER CONSOLS.—The end in Wheel Thomas's lode is increasing in size, being now 3 ft. wide, composed of spar and floukan, with some good stones of copper ore; we are still driving on the north side with two fms. of engine-shaft, producing very favourable, composed of capel, killas, and spar, with a quantity of sulphur. The men are progressing very satisfactorily, and I hope shortly to have something good to inform you of.—S. KEAR: Oct. 17.

PEDN-AN-DREA UNITED.—The summer has been engaged driving north in the 68, and have driven 3 ft. through the tin ground since last week; the ground in the end is producing fine work for tin, and the prospects are good. In the 68 west we are driving the level 17 ft. wide, on a good lode of tin. In the 68 east the lode is 9 ft. wide, producing excellent tinstuff. In the winze sinking below the 75 level,

Butler and Basset United, all situated in the same north and south channel of ground, are opening well, and the prospects are not only most encouraging but of the most permanent character. South Carr lode, also in the same district, holds out much promise, the leader of ore being 6 in. wide at the shaft, now 55 fms. from surface, whilst the strata are becoming more congenial for mineral."

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET, London, Oct. 19, 1855.

COPPER.	£. s. d.	QUICKSILVER.	p. lb. 1s 9d-1s 9½d.
Sheathing and bolts . . . p. lb.	0 1 2	Foreign . . . p. ton.	23 17 6-24 0 0
Bottoms . . . p. lb.	0 1 3	To arrive . . . p. ton.	24 0 0-24 2 6
Old (Exchange) . . . p. lb.	0 1 0½		
Best selected . . . p. ton.	129 0 0		
Tough cake . . . p. ton.	126 0 0		
Tin . . . p. ton.	126 0 0		
South American . . . p. ton.	113 0 0		
IRON.	per Ton.	English, blocks . . . p. ton.	123 0 0-
Bars, Welsh, in London . . . 9 10 0-9 15 0		Ditto, Bars (in barrels) . . . 124 0 0-	
Ditto, to arrive . . . 9 0 0-		Ditto, Refined . . . 128 0 0-	
Nail rods . . . 10 0 0-10 10 0		Strait . . . 122 0 0-	
Stafford, in London . . . 11 10 0-12 0 0			
Bars, ditto . . . 11 0 0-11 10 0			
Hoops, ditto . . . 12 0 0-12 10 0			
Sheets, single . . . 13 0 0-13 10 0			
Pig, No. 1, in Wales . . . 5 0 0-5 5 0			
Refined metal, ditto . . . 8 0 0-8 10 0			
Bars, common, ditto . . . 8 0 0-8 10 0			
Ditto, railway, ditto . . . 8 10 0-			
ditto, Swed. in Lon. toar . . . 14 10 0-16 0 0			
Pig, No. 1, in Clyde . . . 3 16 6-3 17 0			
LEAD.			
English Pig . . . 25 5 0-25 10 0			
Ditto sheet . . . 26 0 0-26 10 0			
Ditto white lead . . . 26 0 0-26 10 0			
Ditto white . . . 27 0 0-27 10 0			
Ditto patent shot . . . 27 0 0-27 10 0			
Spanish, in bond . . . 24 0 0-24 10 0			
American . . . none.			
FOREIGN STEEL.			
Swedish, in kegs, to arr. . . 15 0 0-20 0 0			
Ditto, in fagots . . . 21 0 0-			
English, Spring . . . 18 0 0-23 0 0			
BRASS (sheets) . . . p. lb.	12½d.		
Wire . . . 11½d.			

* At the works, 1s. to 1s. 6d. per box less.
† Thirty days credit, and free on board at Rotterdam. The per centage of peroxide is about 60 for Nassau lump, 60 to 61 for Gieslen, and 70 and 73 for Gieslen ground.

REMARKS.—The currency of last week is without the least variation, and will probably continue during the ensuing week with but slight fluctuations, as sellers are indisposed to transact business at reduced rates, and the demand for most metals at the moment has somewhat abated.

COPPER.—Although merchants' shipping orders have been quite so plentiful, there has been a fair business doing, and the recent large quantity contracted for by the Government and the East India Company keep the smelters fully occupied. The ores sampled on the 26th Sept., and sold at Swansea on the 16th inst., amounted to 1356 tons; the quantity announced to be brought forward for sale on the 30th inst. is 1166 tons.

IRON.—A few contracts have been passed in English bars, at 9d. per ton for one month's delivery, f.o.b. in London; and 9d. 10s. out of stock, for immediate shipment. Staffordshire bars, hoops, and sheets, have been enquired for, but not in large quantities. Scotch-pigs have been seriously affected by the constant advances in the Bank rates of discount. Transactions of late have been very unprofitable, and the market closes with little disposition to operate. Yesterday a decline of 1s. per ton took place, when it was ascertained that a further rise of ½ per cent. had been affixed to the Bank rate of interest on short bills, and to-day on 'Change there were sellers at 76s., mixed numbers, g.m.b., f.o.b. in the Clyde. Indian charcoal pigs are now quoted 7d. per ton in London.

LEAD.—The market is steady, at previous quotations.
SPELTHER.—Parels on the spot have changed hands at 24d.; for Nov. shipment business has been done at 24d. 5s. The market closes quietly, and rather in favour of buyers: 23d. 17s. 6d. per ton would probably not be refused.

TIN.—Has only been sold in small quantities, but prices have in no way differed, either for English or foreign qualities.

TIN-PLATES.—There are buyers in our market, but at limits that will not terminate in business being done.

STEEL.—No sales reported.

QUICKSILVER remains as last quoted.

MANGANESE.—Firm at our quotations, at which a considerable amount of business has been doing.

GLASGOW, OCT. 8.—The price of pig-iron remained very steady at 77s. to 77s. 6d. per ton until today, when the unexpected news of a further rise in the Bank of England's discount rate caused a slight decline. At one part of the day iron was offered at 76s., but the market closed with a firmer feeling, buyers 76s. nett, sellers at 76s. 6d. To-day's quotations are.—No. 1, Gartsherrie, 82s.; No. 1, g.m.b., 77s. 3d.; No. 3, g.m.b., 76s. Shipments for the week ending 13th inst.—Foreign, 3222 tons; coastwise, 8345 tons=11,567 tons. In the corresponding week of 1854 they were:—Foreign, 2535 tons; coastwise, 6005 tons=8540 tons.

LIVERPOOL, OCT. 18.—Our metal market presents but little worthy of remark during the past week, and business generally has been limited, the increasing dearth of money operating as a damper, and preventing transactions which would otherwise be entered into. Scotch Pig-iron has been neglected, although shipments for the week have been again large—11,500 tons. The entire absence of speculative enquiry, added to the small purchases by the trade, who keep themselves supplied only for their immediate requirements, cause the market to be inactive, and prices nominal. In Welsh bars, a fair amount of orders has been booked, and quotations in some instances have been withdrawn, the large makers being stiff in their rates. Staffordshire Iron is in moderate request only, as might be expected at this season of the year, and prices, if anything, favour buyers. The same remarks apply also to Tin-plates, for which orders are light, buyers holding off for a further reduction in the price of English Tin, and which is not at all unlikely. Lead and Copper continue to be well enquired for, and prices are maintained. Swedish Steel is also wanted. The quotations are:—Iron: Merchant bar, 8d. 15s. to 9d. per ton.—Tin: Common block, 123s. per cwt.; common bar, 124s.; refined block, 127s.—Tin-plates: Charcoal, 1C, 33s. to 34s. per box; coke, 1C, 28s. to 29s.—Lead: Sheet, 26d. per ton; pig, 25d. 10s.—Zinc (sheet), 31d. per ton.—Copper: Bolt and sheathing, 1s. 2d. per lb.; tile and tough cake, 126d. per ton; best selected ditto, 129d.—Yellow metal sheathing, 1s. per lb.—Steel: Swedish keg, 19d. 10s. to 20d. per ton; fagot, 20d. 10s. to 21d. per ton.

MINES.—The mining market has not been in a very active state this week, and great fluctuations have taken place in two or three descriptions of shares. The further, and almost unprecedented, increase in the rate of discount which has been announced by the Bank directors, however much it may check the export of gold, does not tend to encourage speculation, or to improve prices of purely speculative mines. In dividend stocks prices are better sustained, and there has been a good business doing in North Basset, at 32½ to 33; West Basset, 33; Wheal Basset, 760 to 770; East Basset, 50 to 52½; Craddock Moor advanced to 37; West Frances were 18 to 20 (sellers) on Tuesday and Wednesday, but on Thursday rose suddenly to 32½, 35, 37½, and a large business done in them; reports of a discovery in the mine were rife in the market, but no official intelligence has been received of it; a good many orders to purchase shares, however, arrived in town. Alfred Consols have been firm, at 14 to 14½; Devon Consols, 400 to 410; Morilyn, 2 to 3, and enquired after; the mine is looking better. Trefusis in demand, at 11½ to 12; Rosewarne flat, at 190 to 200; Hender, 5 to 5½; Clifham and Wentworth, 17½; Condurrow, 130 to 135; Tamar Consols, 2½ to 3; Treveltha, 2½ to 2½, and enquired after.

We understand Wheal Agar has passed into new hands, and is divided into 6000 shares, with a capital of 3000d. paid up, for the vigorous prosecution of the works. The mine is in the parish of Illogan, near Redruth, and will be managed by a London committee, consisting of Messrs. Harcourt Hill, Joseph Lyle, and W. A. Thomas, Chairman of the Devon Great Consols.

At the South Tamar meeting, the profit shown on the quarter's working was 2253d. 8s. 4d., and a dividend of 2250d. declared. As the accounts of the mine were printed and sent to each shareholder some days before the meeting, and were not circulated again in detail after the dividend was declared, the very short statement referring to the dividend in the *Mining Journal* of Saturday last, has, it appears, led to some remarks upon, and to wrong conclusions with regard to, the financial position of the mine. It would appear, from the abridged statement published, that credit was

given in the accounts for a loan of 1900d., making credits 9084d. 11s. 7d.—Expenditure, 6834d. 3s. 3d.: leaving a balance in favour of the mine of 2253d. 8s. 4d. From this it has been inferred that the dividend was paid from the loan, which is very far from being the case. We believe that the accounts of few mines in Cornwall are in so favourable a position, or so well managed, as those of South Tamar, as the ore bills are never discounted to pay dividends. The loan affair has been explained to us thus:—On July 25 a cost-sheet for 1486d. was due, but the ore bill for lead sold in the previous April was not due till July 31, and the secretary advanced 1200d. towards meeting the cost, and which sum was repaid him six days afterwards, when the bill came to maturity. The same thing occurred again, in regard to 700d. advanced on Aug. 29, and repaid the secretary on Sept. 29. These sums were charged under the head of expenditure in the accounts. It is, however, much to be regretted, considering the way in which these loans were made and repaid, that they were entered in the accounts at all, without explanation. They have given rise to injurious reports, and it would appear that when the secretary advances 1200d. for a few days only, ore bills to the value of nearly 7000d. were in-hand. The present financial position of the mine is as follows:—After paying a cost-sheet of 1500d. on Sept. 25, the cash balance in hand, being profit on three months' working, was 2253d. 8s. 4d., out of which the dividend on the 11th inst. (2250d.) was declared. But in this account credit is only given for ore sold to June last. The ore bills for lead since sold—viz., 119 tons on August 3, 2358d. 8s. 4d., due November 3; 120 tons sold on Sept. 5, 2293d. 16s. 4d., due Dec. 8; and 120 tons sold this month, computed, 2400d.: altogether, 7052d. 4s. 8d.—were not credited at all, but are in hand for the next dividend. Official List.—

SATURDAY, OCT. 13.—Craddock Moor, 33 to 34; Ivybridge, 27s.; Lady Bertha, 23s.; North Basset, 32 to 32½; Sortridge Consols, 6 11-16, 6-13-16, 6½, 7; Treveltha, 2½; Wheal Mary Ann, 37½; Wheal Kitty, 40 to 42½; Wheal Zion, 23s. to 25s.

MONDAY.—East Basset, 54; East Buller, 8, 8½, 8½; Lady Bertha, 18s. 6d., 23s., 21s., 22s., 19s., 17s. 6d., 19s. 6d., 22s.; South Caradon, 310 to 315; South Robert, 6s. to 4s.; Sortridge Consols, 6l. 16s. to 6l. 18s.; Tamar Consols, 2½ to 2½, Treveltha, 2½, 2, 2-7-16; Wheal Basset, 770; Wheal Wrey, 2½; Wheal Grenville, 2½ to 12½; Wheal Ludcott, 17s. 6d. to 18s. 6d.; Wheal Zion, 22s. 6d. to 24s.

TUESDAY.—Drake Walls, 14s.; Lady Bertha, 18s. 14s., 15s., 17s.; South Caradon, 310; South Robert, 6s.; Tamar Consols, 2½ to 3.

WEDNESDAY.—Clifham and Wentworth, 16½, 17, 17½, 16½, 17; East Basset, 55, 47½, 50; North Basset, 32½, 32½, 33; Treveltha, 2½ to 2½; West Sortridge, 5s. 6d.; West Frances, 19½, 20, 19½, 19½; Wheal Wrey, 8½ to 9; Wheal Zion, 22s. 6d., 24s., 21s., 20s.

THURSDAY.—Clifham and Wentworth, 17, 17½, 16½, 17½, 17½; East Basset, 50; Lady Bertha, 15s. to 17s. 6d.; West Frances, 30, 32, 30, 31, ex call; Wheal Zion, 17s. 6d. to 20s.

FRIDAY.—Alfred Consols, 14, 14½, 14½; Condurrow, 135 to 130; East Basset, 52½; East Gunnis Lake, 4 to 4½; Lady Bertha, 22s., 24s., 24s. 6d., 25s.; South Robert, 5s.; Sortridge Consols, 6l. 17s.; Tamar Consols, 2½ to 3; Treveltha, 2½ to 2½; West Basset, 33; West Frances, 35, 32½ (ex call), 37½, 32½ (ex call), 32, 30, 32½, 32, 29, 31, 37½; Wheal Tehidy, 22s. 6d.; Wheal Zion, 19s., 20s., 21s.

The following business has been done on the Stock Exchange, although the greater portion of the transactions are not on the Official List:—
SATURDAY.—Great Polgotho, 2 to 2½; Lady Bertha, 23s. to 25s.; West Sortridge, 5s. 6d. to 6s.; Great Wheal Vor, 16s. to 17s.

MONDAY.—West Providence, 12½; East Buller, 8½; East Basset, 52½; Wheal Trelawny, 25; South Caradon, 320; Gilmar, 6½ to 7; Lady Bertha, 18s. 6d. to 22s.

TUESDAY.—Lady Bertha, 17s. 6d. to 1; Sortridge Consols, 6½; Darren, 4½; Chancellorsville, 2 to 2½.

WEDNESDAY.—Clifham and Wentworth, 16½ to 17; Wheal Zion, 22s. 6d. to 24s.; East Basset, 47½ to 50; West Sortridge, 5s. 6d.

THURSDAY.—Lady Bertha, 15s. to 17s. 6d.; West Frances, 30 to 32; East Basset, 50; Wheal Zion, 17s. 6d. to 20s.

FRIDAY.—Rosewarne, 200 to 215; Lady Bertha, 21; West Sortridge, 6s. to 6s. 6d.; Fort Bowen, 3s. to 3s. 6d.; Sortridge Consols, 6½ to 7; Tincroft, 2½ to 3; East Russell, 25s.

The sales of copper ore in Cornwall during the quarter ending 29th of September, the particulars of which we published in the *Journal* of that date, show the following results:—

Date.	Av. stand.	Prod.	Price.	Tons ore.	Fine cop.	Amount.
July 5	12	147 17	6½	2854	190 13	£19,961 1 0
" 12	147 1	6½	7 2 6	4989	334 6	35,446 0 0
" 19	143 14	6½	7 4 0	4276	296 12	30,882 13 6
" 26	146 12	6½	6 4 6	4012	246 14	25,127 2 0
Aug. 2	145 0	6½	6 9 0	3207	266 7	27,049 19 0
" 9	142 7	6½	7 7 6	4773	340 18	35,401 9 0
" 23	146 6	6½	6 3 6	4857	295 15	29,910 3 0
" 30	151 15	5½	5 13 0	3214	178 11	18,257 15 0
Sept. 6	143 16	7½	8 0 0	2270	169 17	18,185 15 6
" 13	146 4	6½	7 4 0	5159	350 13	37,119 17 6
" 20	146 10	6½	6 8 0	4705	294 18	30,264 7 0
" 27	149 19	6½	6 13 0	3799	238 11	25,325 19 0
Total.	1446 1	6½	£6 15 6	49,106	3203 17	£332,932 18 0
June quar.	143 3	6½	6 12 0	48,245	3155 4	318,966 10 6
Mar. quar.	149 17	6½	6 5 0	45,850	2993 11	287,005 8 0
Dec. quar.	142 14	6½	6 8 0	40,146	3150 17	314,438 15 0
Total for the year.				192,347	12,443 9	£1,253,433 6 6
Showing a quarterly average of				48,087	3,110 7	313,358 6 6
Corresponding quarter, ending Sept. 1854				45,728	3,002 6	292,185 19 0

The quarter just terminated proves to be the greatest for the year, both in the amount of fine copper and money, as well as for a considerable time past. The ore has realised on the same produce this quarter 3s. 6d. per ton more than that ending with June last, exhibiting a healthful state of affairs, leaving handsome profits to the dividend-paying and large productive mines, and enabling the smelters to make enormous profits. The price they get for the metal has been stationary for upwards of two years, and seems likely to remain so, the demand for it exceeding all precedent.

We need comment no further. Mines that are in full work, and do not pay at the present rates, ought to show very excellent prospects, or otherwise be abandoned. There are not too many labourers for the work; on the contrary, labour is high, and necessarily so, from the price of food, &c. Materials of every description are likewise advancing; consequently, putting on additional works only tends to advance the price of both, doing real good to no one, except the artful concocters of new schemes, who seldom care for aught else but sacking the premium they obtain by sale of shares by advertising, and in the open streets.

Our quarterly statements speak for themselves. Any shareholder can compare our lists from quarter to quarter for a series of years past, and therein mark the progress or retrograde movement in each, or any particular mine, which would tend to a better result than watching the up and down movement in the prices quoted for shares from day to day, or week to week. Were this done, parties with spare capital would be attracted more than ever to the very large advantages to be derived by a guarded investment in our well managed mines. There is nothing of a speculative nature that can show anything compared to the vast profits derived from good mines. Our endeavour has been, and shall be, to continue urging upon our readers the necessity of their perusing with attention our weekly and quarterly returns of mineral actually sold, note the mines they emanate from, and use the utmost caution before venturing among the list of those which sell nothing but their shares.

At Botallack Mine meeting, on Tuesday, the accounts for July and Aug. showed—Balance last account, 2024d. 8s. 7d.; copper ore sold (deducting dues 1-18th, 138d. 12s. 1d.), 2336d. 6s. 7d.; tin sold (deducting dues at 1-24th, 75d. 4s. 4d.), 1730d. 1s. 6d.; sundry credits, 145d. 12s. 5d.=6256d. 9s. 1d.—Mine cost, 1651d. 17s. 3d.; merchants' bills, 787d. 17s. 2d.; carriage, 194d. 12s. 10d.; coals, 199d. 7s. 10d.; shipping ore, 54. 3s. 4d.; leaving balance in favour of mine, 3417d. 10s. 8d. A dividend of 1400d. (7d. per share) was declared, and 2017d. 10s. 3d. carried to the credit of next account. The profit on the two months' workings was 1395d. 2s. 1d.

At Wheal Margaret meeting, on Aug. 28, the accounts for three months ending June showed—Balance last account, 332d. 2s. 8d.; tin sold (61 tons & carriage, 3633d. 14s. 6d.; sundries, 44d. 19s. 9d.=3711d. 16s. 11d.—Labour cost & carriage, 2016d. 7s. 11d.; coals, 181d. 6s. 10d.; merchants' bills, 455d. 5s. 10d.; property tax, 38d. 1s. 4d.; lord's dues, 17d. 5s. 2d.; leaving balance in favour of mine, 825d. 12s. 10d. The profit on the three months' workings was 792d. 10s. 2d. A dividend of 784d. (7d. per share) was declared, and 414d. 12s. 10d. carried to credit of next account. It was stated at the meeting that the prospects of the mine were cheering; that the quantity of tin ground laid open and in reserve amounted to between 20,000d. and 30,000d.; and that a good dividend might be expected at the next meeting.

At West Wheal Seton meeting, on Tuesday, the accounts showed—Balance last audit, 218d. 5s. 3d.; copper ore sold, 3388d. 10s. 5d.=3606d. 15s. 8d.—Mine cost, July and August, 1276d. 10s. 1d.; merchants' bills, 474d. 4s. 1d.; dues, 225d. 18s.; leaving balance in favour of adventurers, 1656d. 3s. 6d. A dividend of 5d. per share was declared.

The Newtonards Mine (Isle of Man) has paid a dividend of 1d. per share.

At North Wheal Basset meeting, on Wednesday, the accounts showed—Balance last audit, 4655d. 12s. 10d.; copper ore sold, 8106d. 8s.; tin sold, 49d. 11s. 11d.; income tax on dues, 36d. 2s. 2d.=12,817d. 14s. 11d.—August dividend, 450d.; labour cost, July and August, 1774d. 8s.; merchants' bills, 1179d. 18s.; tribute, 357d. 7s. 9d.; royalty, 511d. 2s. 3d.; sundries, 57d. 6s. 10d.; leaving balance in favour of mine, 4407d. 13s. 2d. A dividend of 15s. per share was declared. The estimated amount of receipts over expenditure before the next meeting will be 4716d. 8s. 2d. Capt. Thomas Glanville reported very favourably on the mine, and stated that he estimated their next sampling would be about 400 tons of good quality ore.

At South Tamar Consols meeting, on the 11th inst., the accounts showed—Balance from last audit, 289d. 5s. 3d.; loans, 1900d.; sale of lead ore, 6895d. 6s. 4d.=9081d. 11s. 7d.—Mine cost, 4420d. 5s. 9d.; loan paid, 1900d.; interest on ditto, 17s. 9d.; lord's dues, 414d. 16s. 6d.; income tax, 22d. 6s. 3d.; office expenses, 42d. 17s.; leaving available balance, 2237d. 8s. 4d. A dividend of 5s. per share was declared. Mr. James Wolferstan reported that the stopes throughout the mine were yielding at the present time better than usual, and they had hauled more solid work than for months past. The pitwork and machinery were in excellent order, and well prepared for the coming wet season.

At the Kirkcubrightshire Mining Company monthly meeting, on Tuesday, the accounts showed a balance in favour of the mine of 115d. 5s. 1d., after Sept. costs were paid. A dividend of 3s. per share was declared. Since then a cargo of lead ore (30 tons) has been sold, at 15d. 5s. per ton.

At South Tolgus Mine meeting, on the 18th inst., the accounts showed—Balance from last audit, 614d. 15s. 3d.; ores sold (less lord's dues), 1627d. 9s. 11d.=2242d. 5s. 2d.—Mine cost, 1198d. 11s. 11d.; merchants' bills, 502d. 0s. 3d.; leaving balance in favour of mine, 541d. 13s. Capt. R. Youren, R. Goldworthy, and J. Williams, reported that since last meeting they had driven Youren's lode in the 78, west of Mitchell's, 6 fms., and had opened some good ore ground.

At East Wheal Tolgus Mine meeting, on the 9th inst., the accounts showed—Balance last audit, 497d. 15s. 3d.; mine cost, April to Aug., 1217d. 5s. 2d.=1715d. 0s. 5d.—Calls received, 1260d.; leaving balance against the mine, 455d. 6s. 5d. Capt. Joseph Jewell reported that, on the whole, the old mine after forsaking out the water looked rather better than they expected; and before long, after their sink was down another level, they hoped to have something good to report.

At the Tywardreath Mine meeting, on Monday, the accounts showed—Balance last audit, 480d. 11s. 7d.; mine costs, May to September, 741d. 11s. 11d.=1221d. 13s. 6d.—Calls received, 839d. 15s. 5d.; sale of boiler, 75d.; leaving balance against mine, 256d. 18s. 1d. Capt. Francis Barratt reported that they had driven the cross-cut 21 fms. 4 ft. south, or, upon an average, about 6 ft. a week; the ground had been, and was still hard, and they could not now drive more than 4½ feet a week. Capt. John Hancock and Joseph Jewell, who had inspected the mine at the request of Messrs. John Taylor and Son, also reported that the chances of any valuable discovery being made by the further extension of the cross-cut would not warrant the expenditure which must be incurred for that purpose. It was, therefore, resolved to call a special general meeting of shareholders on the 29th inst., to consider and decide on the continuance or abandonment of the adventure.

At West Wheal Towan meeting, on the 10th inst., the accounts showed—Calls received, 952d.; tin, copper, mangle, and materials sold, 3033d. 19s. 8d.=3985d. 19s. 8d.—Balance last audit, 634d. 15s. 11d.; mine costs, March to August, 3160d. 15s. 2d.; leaving balance in favour of mine, 150d. 8s. 6d. Capt. Joseph Nunn and George Rogers reported that the different objects recommended for trial had so far been vigorously carried out; and that, although they had not met with such success as could be wished, yet, on the whole, things were looking more cheering.

At North Wheal Crofty meeting, on Monday, the accounts showed—Balance last account, 17d. 6s. 1d.; copper ore sold, 1974d. 6s. 7d.; rent of burning-house, 8d. 3s. 2d.=1983d. 10s. 10d.—Tutwork cost, July and Aug., 732d. 14s. 10d.; copper balances, 48d. 15s. 4d.; merchants' bills, 520d. 13s. 2d.; leaving balance in favour of mine, 245d. 12s. 6d. Capt. Joseph Vivian reported that the tribute department continued without much alteration. They expected to make a profit at their next account of 200d.

At the East Tamar Consols quarterly meeting, on the 11th inst., the accounts showed—Balance last audit, 179d. 13s. 2d.; sale of floor-spar, 111d. 15s.; by calls received, 628d. 15s.=920d. 3s. 2d.—Mine costs, 620d. 16s.; office expenses, &c., 27d. 7s.; leaving balance in favour of mine, 263d. 0s. 2d. The estimated expenditure over receipts to Jan., 1856, was 259d. 19s. 6d. A call of 1s. per share was made. Mr. W. Mortimer, of Exeter, attended on behalf of parties holding 110 shares, forfeited at the last meeting for the non-payment of calls, which had been remitted the day after that fixed for the payment. A resolution was passed, authorising the committee to transfer them to the respective parties, on payment of all calls due. Mr. James Wolferstan reported that the prospects in the north part of the mine had somewhat improved during the last few days. They had about 5 tons of ore at surface, to be sampled immediately, and had orders for floor

Notices to Correspondents.

Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly filed on receipt: it then forms an accumulating useful work of reference.

Sub-division of Shares.—Sir: The remarks made by you at various times, in regard to the small number of shares, although so clear and judicious, does not appear to have produced any good result; still it is to be hoped you will urge it, so as to give a greater choice of investment to those who, having 30s., 50s., or 100s., are desirous of making a better income than is derived from the Funds. Why it is not done I cannot understand, as a wider field of purchasers must produce better prices, which may be proved by facts, for instance, Wheel Basset shares, only 25s. cannot be bought under 750s.; but West Basset, being in 6000, are about 32s. each, and, therefore, within the reach of a large number. Again, Rosewarne, 25s. shares, are about 220s., or 225s.; Wheel Wrey, in 4000, are 8s. 10s. Let any one reckon the interest of money given by these prices, and he will find that in small numbers and high amounts pay the highest interest, and therefore an immediate advantage would result to holders, if they were divided into 1024.—A. JONSTON: Cannon-st. West.

Mining in St. Austell District.—Sir: "A Friend to Mining" would be obliged by the purport of the managers of the mines in the St. Austell district if they would supply him with the numbers of men, boys, and girls, employed in their respective mines, including Par Consols on the east, and those on the west as far as Great Hemas and Dewgas. The object is to prepare for some useful record in connection with the locality. Address to "F," care of the editor of the Mining Journal, 26, Fleet-street, London.

Liberty Mining Company.—Sir: As a long holder (no far as time and even amount, considering the premium given) in Liberty Mine, I was much pleased in seeing the report, published in your Journal, stating that 2000. worth of gold had been made in the month, with only quarter force employed. When the full force is on, we should, therefore, have 8000. per month returns; or as promised, probably officially, not long since, 5000. per month profit. When this is actually done, extra machinery will, of course, be erected, which can soon be effected. Should the new patent lately named realise expectations, another source of advantage must accrue to the company. I perceive in Sir Charles Lyell's special report of the "New York Industrial Exhibition," the tract of land in the Eastern United States, in which this mine is situated, is of the lower Silurian and arenaceous beds, belonging to the upper metamorphic series of rocks. This land, Sir C. Lyell states, has been productive of considerable amounts of gold, and is of the proper nature for producing it. I trust, therefore, this company may make some profit to the proprietors, as it has been from the first a genuine one, and that it may prove a systematic and successful attempt to explore the mineral resources of the place, rather than, as is too often the case, an instance of chance or speculation.—L. H.: Oct. 16.

Wheal Poros Mining Company.—We have never received the statement of accounts promised at the last meeting; but if any shareholder will forward us a copy, they shall appear in the Journal in a condensed form.

East Basset.—Sir: In your Journal of late have appeared several letters on East Basset, all of them written with a view to darken the eyes of those who do not know its locality. In none of the letters is it noticed that a great gossan lode is driven through in the adit level at Wheal Basset (the mine that is now so rich); but this lode being at the north boundary of their sett, they consider it useless to explore it in the ground below the adit level: hence it is entirely below the adit level, as its locality, or dip, is into East Basset. The calculation is, that at 30 fms. from adit it will dip into East Basset ground, and the lode now so rich in Copper Hill is supplied by some to be the same lode, which has never yet been seen in East Basset working. Capt. Bailey, of St. Austell, told me that he purchased his shares in this mine in consequence of this very promising lode; and the cross-cut now driving south in the 60 fm. level at East Basset must cut it in six or eight months' time. I now address gentlemen out of the county, to beware of the knowing ones in Cornwall; otherwise they will lose the chance of a very great prize. In this immediate locality, there is Copper Hill east, Great Buller and the rich Basset south, North Basset west, and this East Basset is edged in between them, as there is only a dividing fence to separate the one from the other.—A. BAL CAPTAIN.

Messers Gold Mining Company.—Sir: Permit me to enquire, through your valuable Journal, whether this company is still in existence? If so, where is the business carried on, and what are its prospects?—W.: Lincoln, Oct. 16.

"T. B. C." (Cardiff).—The principle is bad; secretaries are always enabled to obtain the earliest and most correct information of the mine, and, consequently, have a better opportunity of dealing in shares. This is manifestly unfair to the other adventurers; but the evil is too deep rooted to be remedied, and must be tolerated, as it cannot be avoided.

Devon Buller.—Sir: Knowing that you are at all times anxious to state facts only respecting mines, I take the liberty to give you such concerning the above mine, believing that if reports were confined to truth, the adventurers would in the long run be benefited by them. In your last week's Journal is a report from W. Rowe, who states himself to be a small adventurer (like myself), the object of which must have been to puff the shares, but it has not had its desired effect; therefore I say again that it does an injury. He states that the stopes in the back of the 20 will turn out 5 tons a fm., and the bottom of the level in places 5 tons a fm.; if this be the case, how is it that more ore has not been raised? During the last two months we have been driving two levels in the 20, and stopping the back and bottom of the level; I think altogether we have explored about 40 fms. of ground, from which we sampled 35 tons, and say about 5 tons now at grass for sampling; this falls considerably short of 5 and 5 tons a fm. I believe we have a fair prospect; but we must wait patiently for results. I consider this mine, as many of the small adventures, is now suffering from exaggerated reports. A short time since the shares were selling at 3s., and now they are quite at a standstill.—J. DAVE, miner: Buckland, Oct. 15.

DISTON IRON ORE COMPANY.—Sir: As a shareholder in this concern, I may, perhaps, enquire of the directors the meaning of two items which occur in the balance-sheet. On the Dr. side, there appears—"Cash received for shares sold, 176l. 5s. 3d." and on the Cr. side, "Shares bought on Stock Exchange, 414l. 13s. 6d." As I have reason to believe the directors are respectable men, I hope they will explain why they interfered in the sale or purchase of shares. I should also like to know when a further meeting of shareholders will be convened.—R. W. B.: Manchester, Oct. 17.

The Black tin of the Union Tin Mining Company (16 tons = 10890. 18s. 3d.), instead of being sold in the quarter ending Sept. 29, as stated in last week's Journal, was the whole amount from the 1st Jan. last.

CORREY UNITED MINING COMPANY.—In reply to our notice respecting these mines last week, we have received a statement of accounts, in which it is shown that, for the four months ending with July last, the balance in favour of the company was 889l. 18s. 10d. In this account, however, it is right to state, that credit is taken for sale of ore Sept. 22d, 53 tons, 912l. 10s. The statement of liabilities and assets shows the amount in favour of adventurers to be 281l. 18s. 10d. Attention having been drawn to the accounts, of course, those interested will examine the statements, and judge for themselves of their correctness.

THE TIN TRADE.—We are obliged to "Tinner" (Breeze) for his communication on the Wheal Vor district, which shall appear in next week's Journal. We shall be glad to hear again from our correspondent, as opportunity may offer.

"J. M." (Furnival's Inn).—The mine is again at work; a few men are being employed; no profits, however, can be derived from it, so long as the present system is being pursued. The managing director has long since disappeared; another of the committee is going through the Insolvent Debtors' Court, or arranging with his creditors; while the onus of the establishment rests on one gentleman, whose movements are completely paralysed by the tortuous proceedings adopted by his colleagues. It is singular that the lord of the manor has not come on the property for his dues.

ASTURIAN MINING COMPANY.—Sir: My attention has been called, on my return to town, to the letters of two of your correspondents ("Nemo" and "Know-Nothing"), relating, in not very courteous terms, to my recent connection with this company. If the writers of these letters hold any stock in the new company, they must know that Mr. Amory and myself have ceased to act as trustees for the last three years, and that the discharge of the various onerous duties which the office devolved upon us was most unanimously approved at the final general meeting of the old company. The grant of money was the voluntary thank offering of the meeting, and was not taken, as "Nemo" most erroneously states, out of "an exhausted and shrinking capital," but out of a sum of 20,000l., which was paid by the new to the old company; which sum, be it remarked, discharged all the liabilities attached to the latter. Neither Mr. Amory nor myself were connected, except as shareholders, with the administration of the new *societe en commandite*, the interests of the English proprietors being represented by the ex-secretary to the old company, and two shareholders, since deceased; and we have, therefore, no control whatever over the proceedings of the grant, which have, unhappily, placed the affairs of the *societe* in a state of temporary embarrassment.—W. C. GILLAN: Middle Temple, Oct. 18.

CARL and WESTWORTH.—"A Shareholder."—We have attended to the suggestion of our correspondent, but, upon enquiry, we find that at the offices in London Mr. King only acts as town agent, and that the financial statement does not pass through his hands. "A Shareholder" should supply us with information from time to time, when it shall be attended to.

GILFILLAN WALKER.—Sir: Some months back there appeared, from time to time, in your Journal a goodly array of assays, purporting to be the results of careful samplings of many tons of ore from Craggan Mines. Believing, in my humble opinion, that so large a yield of gold as 3 or 4 ozs. to the ton would pay handsomely, almost under any treatment, I was at some trouble to obtain samples of these careful samplings; and having forwarded portions of each packet I obtained to Mr. Calvert for assay, I was much astonished that he, in no one instance, returned more than 3 dwts. 12 grs. to the ton. What are we to do when doctors disagree?—ONE WHO BELONGS TO DOUBT: Fimble, Oct. 17.

ASTORIA-CALIFORNIA GOLD MINING COMPANY.—Sir: The annual general meeting of this company will be held on the last day of the present month; the accounts are not yet in the hands of the shareholders. I trust at the meeting we shall have a strong muster; let them remember July, 1851, nor allow this opportunity to pass without showing in a significant manner their opinion of the gallant superintendent, who for the last five years has received a heavy salary, in return for which he has shown abundance of exence; it must be allowed, in the connection of these he has shown great aptitude. We have a practical man now, let us get rid then of the incubus which has depreciated the value of our property.—SHARES AT A PREMIUM: Warkfield, Oct. 16.

ASTURIAN MINING COMPANY.—Sir: I perfectly agree with the remarks of "An Advertiser" inserted in your last Journal. The character of Mr. Samuel Amory is as well known, that there is no doubt but that he will comply with the wish of the shareholders, and as early as convenient summon a meeting of the proprietors. Mr. Kenneth Mackenzie would be able to give every information of the present state of the company. I am of opinion that our best course would be at once to appeal to Madrid, at least to obtain an injunction to prevent M. de Gimalad from seizing the property next March, which it is feared he will do, unless some steps are taken to prevent such a consummation.—A SEVERE SUFFERER: St. Pinar, Oct. 16.

"C. W." (Hoxton).—The principal European deposits for rock salt are the mines of Wieliczka, in Poland, where perfect cubes are frequently met with; the Salzkammergut, in Upper Austria, Hallein, in Salzburg, and Hall, in the Tyrol, in which it is accompanied with and embedded in clay, gypsum, and other extraneous matter; and Northwich, in Cheshire, where it occasionally presents pure, transparent, and highly cleavable specimens. All these deposits afford extensive supplies of culinary and other economic purposes, though generally in a state so far from pure as to render the process of solution, and subsequent evaporation, indispensable.

Works published at the MINING JOURNAL office, 26, Fleet-street, London:

GEOLOGY AND MAGNETISM. By EVAN HOPKINS. 16s.
GEOLOGY AND MINING—FOUR LECTURES BY G. HENWOOD, 2s. 6d.; by post, 3s.
GOLD ROCKS OF GREAT BRITAIN. By JOHN CALVERT. 10s. 6d.
WINNING AND WORKING OF COLLIERIES. By MATTHEW DUNN. 12s. 6d.
INVENTIONS, IMPROVEMENTS, AND PRACTICE, OF A COLLIERY ENGINEER AND GENERAL MANAGER. By BENJAMIN THOMPSON. 6s.
PROGRESS OF MINING IN 1854. By J. Y. WATSON, F.G.S. 6d.
STATISTICS OF THE MINING INTEREST FOR 1854. By W. H. CUELL, Esq. 6d.
GLOSSARY OF ENGLISH AND FOREIGN MINING AND SMELTING TERMS. 2s.
THE MINING GUIDE. 2s. 6d.
THE COST-BOOK SYSTEM: ITS PRINCIPLES & PRACTICE EXPLAINED. 6d.
THE COST-BOOK—TAPPING'S PRIZE ESSAY—WITH NOTES AND APPENDIX, 5s.
THE COST-BOOK—TAPPING'S PRIZE ESSAY. 6d.
CEYLON: ITS PRODUCTS, CAPABILITIES, & CLIMATE. By C. W. PAYNE. 2s. 6d.
BRITISH MINES CONSIDERED AS A MEANS OF INVESTMENT, with particulars of the principal Dividend and Progressive Mines in England and Wales. By J. H. MURCHISON, F.G.S. 3s. 6d.; by post, 4s.

The MINING JOURNAL has been duly registered at the Post Office, and the Stamped Edition (6d.) can, therefore, be posted and re-posted, as heretofore, for the period of 15 days, care always being taken that the stamp is to be plainly seen. The Unstamped Edition (5d.) can be forwarded by post on affixing a postage stamp.

For the accommodation of our City correspondents, communications or reports may be left at Messrs. HANCOCK and SHARP'S, No. 29, Tokenhouse-yard, where there is a box to receive them; but in all instances it will be preferred that they be sent direct to the office, 26, Fleet-street.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, OCTOBER 20, 1855.

Although the Limited Liability Act has not become so general in its application and operation as some of its warmest advocates, in the first instance, supposed, it is in no way to be attributed to any defect as to the theory or principle of the enactment. On the contrary, the reason why so comparatively few public bodies or companies have availed themselves of its provisions may be found among the public at large, who, perhaps, were taken by the measure somewhat suddenly, and, consequently, were but ill prepared to become the recipients of the benefits which this regulation conveys. The highest authorities have been united in the emphatic declaration that the passing of this Act into the law of the land will be among the greatest benefits the Legislature could confer upon the country at large, since English capital is becoming diverted into foreign channels. Strictly correct as this opinion may be, it is to be feared that the general working of this comprehensive measure may be intercepted and obstructed until certain precedents become established, more substantially to illustrate its efficiency. Caution is always to be found predominating, even in our most successful commercial enterprises; but even caution, in the extreme sense of the term, may be carried too far. It cannot be denied that the limitation of personal liability within the most practical restrictions possible is of the greatest advantage, whenever confidence is sought to be established; therefore, it may be apprehended that adverse circumstances have operated with an undue pressure upon commercial as well as on individual enterprise. Let this be the fact or otherwise, there are various ramifications in which known and limited liability will stimulate great undertakings which do not exactly class, strictly speaking, in the category of commercial speculations or transactions.

In the department of manufactures, machinery, and chemistry, as in the walks of art and science, it is impossible to say how many valuable inventions, discoveries, or improvements, may not now be slumbering in the minds of various inventors, who, from want of sufficient means, are unable to place their works before the public. Thus it is that society is debarred from participating in and enjoying those advantages and benefits which, in the range of art and manufacture, otherwise might have been brought about. How many sterling and, in reality, important improvements are now suspended! Inventors invariably find sufficient obstructions and impediments to contend with, other than the difficulties which limited means invariably carries in its train. Prejudice, professional, and personal pique and jealousy, public apathy, wilful and perverse opposition, will always place a sufficient number of stumbling-blocks in the way of genius. Of novelty, improvement, or scientific invention, it too frequently may be observed that the greater the improvement, proportionately greater will be the amount of opposition which progress and advancement will have to encounter. Under the new Act, the remedy for such evils is presented: the helping hand to enterprise may now with safety be extended. After this manner, the limited means of one party may, under the provisions of this Act, be aided on the principle by which liability itself is limited; and the more fortunate capitalists, knowing themselves to be secure, may, by combination, assist their needy brethren. The same work which any single individual may fear to undertake can, by a body, be readily performed now, under a certain knowledge both of the risk and obligation. How many most important inventions have been strangled in their birth, or fallen stillborn, from want of timely assistance? It is a reproach which too often falls upon us, that the original inventor of any mighty principle or valuable purpose but rarely reaps the fruits of his own invention. An association of a body of enterprising individuals may now be formed, whose purpose and object could not more properly be applied than in providing a remedy for this existing evil. Were such a body once rightly constituted, merit and industry would know, with confidence, where to repair to obtain the required aid. How many improvements which have arisen in steam-navigation have been retarded for want of sufficient means—for instance, when Government aid has been invoked, vessels have been granted, with furnaces, engines and boilers, and their appliances, for experiment, but at the risk of the individual applicant, who always has to find security to indemnify the service from loss or injury, although the right of purchase is reserved, dependent on success.

A correspondent in the MINING JOURNAL of the past week, in reference to the improvements in the steam-engine which have been made by Mr. CRADDOCK, with considerable judgment, but with more reason, argues for the necessity of a fair trial being made, and enquires whether such an instance would not be a legitimate case for taking advantage of the new Limited Liability Act? To this interrogatory, most decidedly we reply in the affirmative—*uno disce omnes*: in the world's metropolis—nay, throughout the whole kingdom—there are many Mr. CRADDOCKS, persons who are in possession of valuable and important improvements, but who only require the means and opportunity for their maturity and development, which obtained would realise, not only for their own individual persons profit and distinction, but for their combined patrons and promoters ample and sufficient remuneration for all risk which in combination would have to be incurred. Success in every instance is not attendant upon enterprise; nevertheless, whenever this result is obtained, the greatest advantages will safely follow; and if losses have to be incurred, they will be borne by a body whose risk under the present Act can be limited, without incurring the further danger which heretofore had to be encountered, in ignorance of results which frequently was entailed upon the unlimited liability principle.

In respect of the Limited Liability Act, it has been argued that the bill was too quickly passed through Parliament; that to precipitation many defects may be attributed; also, that the alleged cost (2500l.) of limiting the liability of any company is excessive. The working of every public measure will, under a judicious observance and administration, correct the evils which practically may be detected in the system; nor is it possible to suppose that such great results could be acquired, such a boon obtained, as the very word limited implies, without the existence of some defect. The cost is certainly an impost which, in some instances, may amount almost to a prohibition, yet this cost is not solely to be attributed to the Limited Liability Act, as the greatest charge arises in compliance with the provisions of the Joint-Stock Companies' Registration Act. The attention both of the country, as well as of Parliament, has been directed to the numerous evils, as well as the excessive charges of registration, which certainly will be quickly remedied. Still, the privilege of the limitation of liability has been admitted, and has yet to be taken advantage

of. Security to the full extent of all actual or prospective investments has been obtained. The guarantee of safety within a known amount has been established, and the means are presented, by combination, of enabling any certain number of persons, possessed of even limited means, enter into responsibilities and obligations for the accomplishment of any design, purpose, or improvement, with the full knowledge that their personal liability is limited. The means will, therefore, be at hand whereby the required number of individuals, even with the smallest resources, by uniting will be enabled to realise those advantages and profits which have hitherto been almost confined to capitalists themselves. The workings of monopoly and exclusiveness will, in a degree, be somewhat frustrated, since inventors may now combine to realise the profits and advantages of their own inventions, even if in the greater degree, and on a more extended scale, the effect of the Limited Liability Act in regard to manufactures, discoveries, and improvements, be not further attempted.

The record of no less than three boiler explosions, since the termination of the first week of the present month, is an event which alone should stimulate the most rigid and searching enquiry, in order that the causes of these explosions, through the minutest investigation, may be ascertained, and remedial measures instituted accordingly. The first of these deplorable accidents occurred at the Kibblesworth Colliery, in the establishment of the Lancashire and Yorkshire Railway Company; and, as misfortunes never come singly or alone, these were followed by that fearful catastrophe at the iron-works of Messrs. LOSH, WILSON, and BELL, situated at Walker, near Newcastle-upon-Tyne, in relation to which a coroner's inquest is now pending. Did failures always disclose their own actual and proximate causes, there would exist the lesser occasion for that rigid enquiry which, in the latter instance, is so imperatively demanded.

In the case of the Kibblesworth Colliery, the particulars relating to which will be found in the MINING JOURNAL of the 6th inst., through the indefatigable exertions of Mr. MATTHIAS DUNN, the Government Inspector of Mines for the Northumberland district, wherein this coal working is situated, it was discovered that the feed-valves had been opened at the instant. Proof was given, in this instance, that two hours previous to the explosion the five boilers appertaining to the engine were in a perfect state; therefore, no ordinary boiling could have diminished the water to any dangerous extent. There was, therefore, no room to doubt that, in consequence of the two valves being opened together, the water in the one boiler which had exploded was either pressed or driven into the neighbouring boiler; and the former having become heated to redness (perhaps beyond), the further introduction of water into the heated and, probably, burned boiler became the direct cause of the accident. This conclusion was corroborated by the fact that, at the critical moment of the explosion, the engineer was in the act of turning on the water.

The Miles Platting explosion, at the works of the Lancashire and Yorkshire Railway, was brought on by the collapsing of a flue over the fire-box, owing to the want of water. This boiler, alleged to have been made at the Haigh Foundry, near Wigan, is 30 ft. long, and of considerable substance. The accident, whereby several of the workmen were scalded (three most severely), occurred at the junction of the flue, at that point where the flue loses the support of the stay. Subsequently to the explosion, it has been discovered that the cause arose in the upper half of the flue, by the fourth plates from the firing door, at the edge of the third plates, but without the rivets giving way, and from a rent extending on the one side into the middle of one plate. There is no reason to consider, in this instance, that there was an excessive pressure of steam at the time of the accident, which, from the appearance of the boiler, is judged to have arisen from an insufficient supply of water. The engineer, in this case, is one of the persons most injured.

The explosion at the Walker Iron-Works, with regard to which the enquiry is now pending, has already resulted in the death of seven persons, the injury of many others, and a considerable amount of damage to the works of Messrs. LOSH and Co. The part of the works where the catastrophe occurred is the lower rolling-mill, erected on the quay of the River Tyne. The buildings are intersected by machinery, worked by two cylindrical boilers. The works were put in motion at 6 o'clock, and went on with their accustomed regularity until the time of the accident, which took place at half-past 10 in the forenoon. Simultaneously with the explosion, the boiler, which is cylindrical, 6 ft. 8 in. in diameter, and 25 ft. long, sprung from its bed, and carried away the roofing of its shed, blowing down two furnaces and their heavy chimneys, and scattered the molten metal and red-hot bricks in every direction. The boiler, which is supposed to weigh about 10 tons, alighted from the place wherein it was set in a timber-yard, 200 yards distant, having in its transit been carried over a hill of considerable height. By some parties it is contended that the cause of the explosion is wrapped in mystery. Among the facts already adduced in evidence are the following:—"The boiler was 25 feet long, by 6 ft. 8 in. in diameter, composed of plates $\frac{3}{16}$ ths of an inch in thickness, and was capable of sustaining a pressure of 50 lbs. upon the inch, although not worked to more than 35 or 40 lbs. The boiler which exploded was in connection with another. Each was provided with two safety-valves, and two floats to denote the quantity of water therein. A cistern is attached, in which the supply water is heated and pumped in boiling hot. The exploded boiler was cleaned on the previous day. There was a continuous feed-pipe which supplied six boilers, from which each had a branch pipe and valve, with flaps to prevent the priming of one into the other. If either of these flaps got out of order the boilers would prime into each other, and the consequence might be that one could be filled with water while the other remained deficient. One main steam-pipe supplied all; but there a branch pipe and valve into each, although, possibly, the boilers might prime through the steam-pipe. They were examined about a quarter of an hour before the explosion. Either boiler might prime itself into the one adjacent if the fire were stronger, but would not prime up the feed pipe, because the flap inside would be shut. The floats sometimes went wrong by losing the inside weights. If the plates became over-heated it would have the tendency to cause an explosion, but if there were sufficient water no over-heating could possibly take place. There were no lead plugs. In case of over-heating, the lead plugs melt, by which the steam and water would rush out and extinguish the fire. If there had been a sufficiency of water in the boiler it would never have exploded, even if the plates had become hot. The boiler will not start from its seat if there be a sufficiency of water in it, although it may burst and fly to pieces. There is a sedimentary deposit left by the Tyne water used, but it was thought that the explosion could not have been caused from such deposit. The foreman of the boiler-smiths had examined the boiler since the explosion, and found that the plates had become red, they having a scorched appearance, which left no doubt that the boiler had become over-heated. The explosion could not have arisen through the pressure of the steam on the plates."

There exists a most remarkable and striking coincidence between the first accident at Kibblesworth Colliery, and the more disastrous explosion at the Walker Iron-Works. In the former case there were five boilers appertaining to the engine, and connected together in a similar manner; in the latter there were six. Each had the feed pipes in common, turned off and on. In the former instance, through this turning on, the whole mass burst into expansive ebullition. Through the exertions of Mr. DUNN, the fact has been ascertained that, by undue pressure occasioned from over-heating, and the valves being open, the water of one boiler was driven into the immediately adjacent boiler, whereby that which had the deficient supply became heated to redness; and at the time the disaster occurred the engineer was turning on the supply, thus proving the direct cause of the accident. In principle, or rather in kind, these explosions resemble each other; and arising under similar circumstances, it is only in degree that they may be said to differ, since through the force of the explosion in the latter instance the boiler was discharged from its own bed, and, although weighing about 10 tons, was projected to the distance of 200 yards, after knocking down two blast furnaces and their chimney shafts, and scattering the red hot bricks and molten metal in every direction. It cannot reasonably be supposed that such disastrous consequences could possibly arise from ordinary causes; the former are only indicative of the magnitude of the force which has produced such visible destruction. Nor can it be concluded that these gunpowder-like results could have proceeded from merely working steam until the exact limit of the elastic strength of the iron boiler had only just been passed. The cause of an explosion so disastrous must be as extraordinary as its effects. It is usual to estimate the force of steam by its distributed pressure throughout the boiler, and under ordinary conditions this is correct; but an explosion introduces very extraordinary conditions, by concentrating upon one certain point the whole acting and expansive forces contained within the boiler. These elastic and expansive forces, when concentrated, measures the ex-

Oct. 20, 1855.]

plive force in operation, and the amount of this force is evident by its effects, shown in the distance to which its reaction carried away the massive boiler, destroying the surrounding works, furnaces, and buildings. The explosive force of water and steam within a boiler will fully account for any amount of devastation which may be committed when suddenly expanding to an atmospheric pressure. The question at issue, therefore, will be, how this excessive and uncontrollable force originated? We have, however, before us the evidence of the foreman of the boiler makers; he states that the plates of the boiler presented a red and scorched appearance. This must have been the result of over-heating, which could never possibly have occurred if the boiler had continued to be properly and sufficiently charged with water. Nor could the disastrous consequences which have ensued arise solely from the unassisted pressure of steam upon the boiler-plates; therefore, over-heating alone was the proximate cause of the latter explosion, as it was of the former, at Kibblesworth Colliery. It is further stated that the boiler which exploded might empty itself into the next boiler, if the fire of the one was stronger than that of the other. Even supposing the valves and feed-pipes to have been in an efficient condition, this circumstance alone will account for a deficiency of water in the heated boiler, if the furnaces were not equal. When it is remembered that water will not boil in a vessel which is heated to white-heat, but will continually give out a vapour, broadly distinguished from steam, because it is not in any way under the ordinary condition of water-vapour, what effect from such combination, with these contingencies, may not result? Steam has its own elasticity hereby suspended; still, if a vapour be generated which necessarily partakes of the temperature of the body from which it is generated, the escape of this vapour from the boiler in which it is thus produced, or coming in contact with a medium not above the temperature of boiling water, then vapour, under these circumstances, will exert a force equal to the entire amount of heat that vapour contains, which will be as much greater than the expansive force of the steam itself at 212 degrees as is the difference between this temperature and that of the overheated boiler, whereby the whole expansive force within the boiler itself was thus brought into operation, and explosion has resulted. The deficiency of water in the boiler, whether it results from negligence or from derangement, whether attributable to defective priming or to the feed pipes, is equally alike immaterial. If the furnace of either boiler, by preponderance, discharging itself, to the prejudice of its neighbour, one will reach the red heat under a deficiency of water. Water, when introduced under these circumstances, becomes spheroidal, and continues so until, by addition, the boiler may be cooled so far as to be unable to maintain the spheroidal form of water. No sooner is this the case than the spheroid, by contact, bursts into steam, and then explosion follows. If too constant a familiarity with danger engenders a certain degree of contempt of it—if carelessness or want of proper precaution follows—if wholesome restraint and judicious restrictions are unavailing, when consequences so lamentable as the loss of so many lives have ensued, it is certainly high time that legislative enactment should interpose; for it must be remembered that, although the stoker (if he is even to be blamed) has paid the forfeit of his life. Nor is this all, since it is owing to the sacrifices of so many follow-beings, who were engaged in the pursuit of honest industry, that we are admonished to the exercise of due caution. Humanity is thus imperatively called upon to interpose to mitigate and avert similar consequences for the future, as well as for the protection of those who remain exposed to the perils and dangers which too frequently result from either deficiency of construction, untoward and accidental circumstances, ignorance, or culpable neglect.

It may be in the recollection of our readers that, some two years since, a company was formed in London, for the purpose of working lead mines in Dalecarlia (Sweden). The shares were subscribed for; reports arrived from the mines, and, according to all received accounts, the property held out every prospect of success; specimens of the ores, and the lead obtained from them, were exhibited at the company's offices; and there was every indication that this was a bona fide adventure. A mining captain, with a competent staff, was dispatched to the scene of operations, and the periodical reports which came to hand spoke most favourably of the undertaking. Prior to this, however, it must be known that a special report had been made by parties dispatched from England, totally unacquainted with the locality, but gifted with such presence and ubiquity, that a stay of some eight-and-forty hours enabled them not only to judge, but to decide, on the capabilities of the district. On their judgment the company was formed, and ushered into the London market. A direction was organised, respectable enough in itself, though the amount of mining knowledge among the whole of the board could be averaged at the minimum rate. They were, however, installed as directors, and it was necessary that they should exercise their powers; and at least, if they were ignorant of the business they took in hand, some efforts should be made to show their governing authority. We know not what instructions they sent out to their agents, but, on the report of one gentleman, they suddenly came to the decision that it would be better for all parties if the concern were at once wound-up. At the same time, in their report, they stated that the agent had acknowledged he had been systematically deceiving them. As soon as this was published, it was indignantly denied; nor have either directors or promoters felt inclined to answer Captain BARRATT'S allegations. We are, therefore, bound to believe that they are based upon truth, more especially when it is known that several of the practical miners who were there are of opinion that it is a good property, and, if honestly worked, would pay. A letter, in last week's MINING JOURNAL, informs us that the Swedes have purchased the property, and are now working it, with every prospect of obtaining a profitable result. We make no comments upon the above facts, but we would merely ask the simple question—is it to be wondered at that mining is in such general disrepute, when we see promising concerns damaged, as this has been, by a want of knowledge at head-quarters? The shareholders have escaped with a trifling loss: had the mine been really bad, we know not how disastrous the termination might have been. Our countrymen have done much preparatory work: of the results of their labours the Swedes are now reaping the benefit. This is, unfortunately, not an isolated instance; but such things always will occur so long as the public subscribe to projects where there is no guarantee that directors or promoters know something of the business they profess to manage.

The Port Phillip and Colonial Gold Mining Company shareholders have been rather uneasy, in consequence of the delay in calling the meeting, and from the fact of the Colonial Gold Company making a call, they apprehend a similar course might be pursued by the directors of the Port Phillip Company. With regard to calling the meeting, we are assured that the delay solely arises from the determination of the directors to lay before the shareholders some definite statement, arising from actual results of the workings now going on. We are further informed, there are ample funds in hand, and no possibility of a call; indeed, at a meeting held at the London Tavern, on the 28th March, 1852, it is clearly shown that the directors have no power to make a call, even were further funds required, as the following resolution was then passed:—"That the directors do not make any further calls upon each share, except by the consent of two-thirds of the shareholders, holding two-thirds of the shares, present at a meeting specially summoned for that purpose." According to the advice received from time to time by the directors of the Port Phillip Company, and from which abstracts are inserted in the *Mining Journal*, the prospects appear satisfactory.

Our attention has lately been drawn to an association which has long enjoyed an unenviable notoriety; we allude to the ASTURIAN MINING COMPANY. From all accounts, it appears that unless the British proprietors adopt some energetic measures to protect their property, in all probability, in the month of March ensuing it will become the property of M. DE GRIMALDI, the present grant of the association. We are at a loss to account for the apathy of the shareholders, as well as the neglect of the trustees, and the inaction of the sole surviving director, who probably finds that every exertion he may make is paralysed by the inaction of those whose bounden duty it is to support him. It is true that a meeting was held in Paris, but numbers of the English shareholders are not aware of the business there transacted, or of the accounts which M. DE GRIMALDI rendered; sufficient it is, that these were only audited by his own friends, and consequently passed in due form. It is to be hoped that the trustees, who have made this unfortunate bargain for their constituents, will see the necessity of energetically acting, and not allow, by their negligence, this magnificent property to be sacrificed. From Miras to Sama, any traveller crossing the mountains can observe the coal cropping out at the surface. With limited means, the Messrs. AGUADO have been enabled to

make their coal mines pay, and a railroad now conveys their produce to the port of Gijon. The Asturian Mining Company's property is of greater importance; not only have they collieries, but there is abundance of iron-stone, accompanied with other mineral deposits, all of which could have been worked to a profit, had not the career of the company been characterised with general mismanagement. It is now, however, too late to redeem past errors. The British shareholders are in duty bound to protect themselves. We counsel them to apply to Madrid. According to Spanish law, the conveyance of the property has not been legally made to M. DE GRIMALDI. He may, if it becomes a matter of litigation, as he has already done, foil the English proprietors, or their representatives, in a French Chamber of Commerce, but we doubt whether he would be allowed to appropriate the property if the question were mooted before a Spanish tribunal, backed, though he might be, by the influence of powerful personages.

MILFORD HAVEN RAILWAY PROJECTS.

It would be impracticable, within the limits of a brief article, to give more than a mere outline of the various projects now on foot for supplying that long-desired desideratum—an easy railway communication between Milford Haven and the northern and midland districts of England. This grand field for railway enterprise, after repeated failures, threatens at last to be stoutly contested by two schemes, both very influentially supported by the landowners and gentry of the respective districts through which they pass. And whatever may be the issue of the pending struggle, the strenuous exertions put forth by each party to secure for their own immediate district what must eventually become one of the most important of our great trunk lines is in the highest degree creditable to the foresight and unflinching energy displayed by the promoters of the schemes in question. The only connection Milford has at present with the great railway system of this country is by means of the South Wales, a circuitous coasting line; and it cannot be hoped that this imperfect communication with the great commercial marts of the kingdom would ever develop the transcendent capabilities of this world-famed harbour. If Milford Haven is to be a worthy rival of the magnificent seaport of Liverpool, it must be supplied with direct communication to the metropolis and the midland and northern districts, and the rich mineral and agricultural districts of Central Wales must, without delay, be belted with the iron band of civilisation.

The main object of this article is to draw attention to two rival projects, each professing to accomplish this object. We shall briefly examine their claims to support, and leave the speculating public to decide which is most deserving of favour. As a preliminary, we may remark that both adopt Shrewsbury as the starting point, and after traversing districts widely apart, meet again at Llandovery, the remainder of the journey being accomplished by means of the line in course of construction from Llandovery to Llandilo, and the rest by the Llanelli and South Wales Railways; or the construction of a new and direct line from Llandilo to Carmarthen, from whence it will traverse the South Wales to Whitland, and also a new line from the latter town to Milford. The Central Wales project traverses the Shrewsbury and Hereford Railway as far as Craven Arms station, 20 miles from the starting point, whence it diverges through Radnorshire (by way of Knighton) to Newbridge and Llandovery. The greater part of the country through which it is proposed the line shall pass is difficult for railway purposes, and to bad gradients may be added the still greater drawback of an almost total absence of the sources of traffic, which alone would justify a large outlay for the construction of upwards of 53 miles of railway through, to a great extent, a barren and difficult country.

The second project, which has by far the largest share of railway and local support, and is most likely to succeed, adopts the Montgomeryshire route. Commencing at Shrewsbury, the line passes over half a mile of the Shrewsbury and Hereford, and afterwards takes an easy course through Meole, Hanwood, Westbury, and skirting the northern base of the Long Mountain, it enters the Oswestry and Newtown at Cefn, three miles north of Welshpool. That line and the Llanidloes and Newtown supply the link to Llanidloes. The country between the latter town and Llandovery has been surveyed, and it is computed a line would not cost more than 5000*l*. a mile.

But to return to the Welshpool and Shrewsbury line, which is probably the only portion of this grand scheme that will be prosecuted in the next session of Parliament. There are two rival projects in the field—one promoted by a weak section of the old Rea Valley Company, but the want of adequate support up to the present time renders it doubtful whether its merits will be discussed within the walls of St. Stephen's in the ensuing session. The other is put forward by Mr. Timothy Burd, of Shrewsbury, and, with a slight modification, is a mere revival of his old Criggion scheme, facetiously called at the time a "scarerow line." It is too absurd to be seriously entertained, and we imagine can only have been revived with the view of extorting some concession from its powerful rival, the Welshpool and Shrewsbury. Judging from the surveys placed at our disposal, the latter line appears to be judiciously laid out by the talented engineer, Mr. Piercy, without prejudice to any party, and we hope no quarter will be given to factious opposition. The total cost of construction from Shrewsbury to Bullington (about 15 miles), where it will join the Oswestry and Newtown as a single line, with land and works for a double line, is estimated at 120,000*l*; and the branch to Minsterly, which will embrace the most salient part of the Rea Valley, is computed to cost 30,000*l* more. The diversions northwards and southwards from the Cefn junction will facilitate travelling, and be a great boon to traffickers, by lessening the mileage.

THE RAILWAY COAL TRADE.—Immense quantities of coal are being conveyed to the metropolis by railway: during last month the Great Northern Railway Company alone paid dues on a quantity exceeding the total shipment for London from the River Wear. Of the quantity carried by the company, 19,065 tons were from the county of Durham, which is not far short of the entire importation from Seaham Harbour in the same period.

In a lecture, recently delivered before the Royal Cornwall Polytechnic Society, by Mr. Robert Hunt, F.R.S., Keeper of Mining Records, &c. (more particularly referred to in another column), attention was directed to some most remarkable points in connection with the action of heat on water that contains no air, stating that, arising from this circumstance, as well as from the spheroidal condition of the steam generated, we have two very active and predisposing causes of boiler explosions. Water we know in three conditions—as a fluid, as steam, and as ice; or as solid, liquid, and aeriform. Water is frozen by the loss of heat necessary to maintain its fluid state: ice formed during agitation contains no air-bubbles, but, under ordinary circumstances (as when Lake ice), the upper portion is filled with air-bubbles in straight lines, as if, in endeavouring to make their escape, they became entangled among the crystals. It is a remarkable fact that water in the process of congelation has the power of rejecting everything; consequently, all the air the water contains is expressed. If we get water which contains no air—*ex. gr.*, liquefied ice—and preventing the access of air, then, if we apply heat, water will be produced, apparently, in its ordinary state—nevertheless, its condition is peculiar. It will not boil at 212° Fahr. In this state, we see the temperature increasing to 230°, 240°, or even 250°, and advancing to between 270° and 280°; about these points, the whole mass will explode with the violence of gunpowder. This condition of water is not unfrequently found formed in steam-boilers, and that, during the process of ebullition, the steam carries off with it the air, the water in the boiler containing very little remnant of the air itself. It often happens that a steam-boiler explosion occurs after a rest of the engine, and that, when the men return, the feed-water, being applied to the water, explosion takes place. Professor Donné has found that, if we take water of this peculiar character, bringing it up to 230°, and place a single drop of ordinary water into it, the whole will boil with extreme violence. Supposing that ordinary water contains no air, and the feed-water is turned on, the entire quantity will then burst into explosive ebullition. We shall probably find, therefore, in connection with boiler explosions, that to the absence of air, and the spheroidal condition of the steam, may be attributed many boiler explosions so frequently happening, which otherwise cannot possibly be accounted for. It may be further stated, that if we take a glass of water, and add any poison—say, corrosive sublimate, or a strong acid—or even an ardent spirit, and then freeze the water, agitated during the process, we shall find the ice get tasteless, colourless, and inert, and that the poison, the acid, or the spirit, will be gathered into an intense drop in the centre of the ice, and all the body will be perfectly pure. To a knowledge of this fact may be attributed the practice of the Russian nobles, who, when

they desired to have more ardent and intoxicating drink than usual, plunged their bottles of wine or spirit into their frozen rivers, until the contents became solidified, and then drank the ardent drop which remained within the centre of the glass.

STOCK, MINING, AND RAILWAY SHARES IN IRELAND.

[FROM OUR CORRESPONDENT IN DUBLIN.]
Oct. 18.—Our Stock Market, as usual, followed the fluctuations of the London funds this week. On Friday last they opened at 87, advanced on the following day to 87½, and have since gradually declined, and closed weakly to-day at 86½. The Mining Market has been unusually quiet; there were only two quotations, but these are at firm prices. The Railway Market was remarkably steady; the highest prices of last week were well maintained, and scarcely any speculative business was done. The following are the latest quotations:—Consols, 86½; New 3 per Cents., 87½; Bank Stock, 22½; Hibernian Bank, 33½; Royal Bank, 19; General Mining Company, 2; Mining Company of Ireland, 13½; Belfast Junction Railway, 40½; Dublin and Wicklow, 5½; Great Southern and Western, 50½; Killarney Junction, 6½; Midland Great Western, 48½; Waterford and Limerick, 19.

The Irish Bank returns for the month are very satisfactory, and show an increase of 300,000*l*. in the circulation.

The Museum of Irish Industry, established through the instrumentality of Sir Robert Kane, to supply the educational wants of this city, will be opened for the season on November 1, when an address will be delivered by the learned director. The course of lectures will consist of 12 on motive-power, by Professor Barker; and 12 on geology, by Professor Jukes, to commence on November 2 and 3 respectively; 12 on chemistry, by Professor Sullivan; and 12 on the animal and vegetable substances used in the arts, by Professor Harvey, will be delivered next May. All these lectures will be free to the public. Independently of these, systematic courses of 30 lectures each will be delivered on alternate nights by the professors, to which an admission fee of 2*s*. 6*d*. only to each course will be required; and when the session is over, prizes of 9*l*. each will be given for the best answering in the subject matter of the four courses. A laboratory, placed under the direction of the several professors, is also attached; thus affording the pupils the means of practically bearing out the observations of the lecturers. This system, adopted also at the Dublin Chemical Society, cannot be too highly praised; and there is no doubt but that the many and great advantages held out by this useful educational establishment will be eagerly sought after, and prized as they should be. It is said that a valuable lead mine has been discovered at Mount Elva, on the estate of Mr. Pierce Creagh, contiguous to the Lisdoonvarna Spa, in the county Clare, celebrated for the purity of their waters, as discovered by chemical analysis.

Some of the directors of the Mining Company are at present inspecting the mines, previous to preparing the report to be presented to the half-yearly meeting to be held early in December. Some specimens of ore, from a new portion of the Gurtinadine Mine, arrived at the office to-day.

Mr. Rich. Turner, of Dublin, has lately contracted to fit up a wrought-iron roof and all the upper machinery of a large theatre at Buenos Ayres, the cost of which will be upwards of 4000*l*.

An experimental trip on the Dublin and Wicklow line, from Bray to Wicklow, has been made by the directors and their friends. The portion of the line from Dalkey to Bray, 16 miles in length, was opened about a year ago; the portion between Dalkey and Kingstown, about two miles in length, was recently opened, so that, by means of the Dublin and Kingstown Railway, six miles in length, the whole distance from Dublin to Bray, 24 miles, is now open for traffic. On the opening of the section from Bray to Wicklow, 16 miles, the line will be completed throughout, and its length will be 40 miles from Dublin to Wicklow. The cost of the whole will average about 25,000*l*. per mile. Considerable difficulty was experienced in carrying out the undertaking: the Dublin and Bray Company amalgamated with the Dublin and Wicklow, and the amalgamated company have leased the Dublin and Kingstown Railway.

THE IRON AND METAL TRADES OF SOUTH STAFFORDSHIRE.

[FROM OUR CORRESPONDENT IN BIRMINGHAM.]
Oct. 18.—The last of the quarterly meetings, held on Saturday evening at Dudley, was numerously attended. As I noticed in my last letter, which was written immediately after the close of the meeting on Thursday last, the actual result of the Bank of England meeting, held at the same time as the ironmasters' meeting here, was not known, and, under an erroneous impression that the discount had been raised to 6 per cent., very little business was done, and the meeting separated rather in low spirits. As you are aware, however, such was not the fact, and on Saturday evening things resumed their former animation. The masters were firm, and prices were fully maintained; although I have heard rumours of a reduction of 10*s*. per ton upon bars having since taken place. This, however, I do not believe, although it is so asserted in quarters most likely to be well informed. Manufactured goods, the principal ingredient of which is iron, have been offered, subject to a reduction equal to 10*s*. per ton on the raw material, and the inference is that it has been rendered possible by the concession of the maker. In a little time, however, we shall soon be able to test the stability of the market. At present there are no grounds for apprehension, unless, as I said last week, the Bank of England shall find it necessary to advance discounts, up-let prices, and stop our works. Up to the meeting on Saturday evening the accounts of the district were well met, and confidence is being rapidly restored. The demand is good, the masters and men, on the whole, are not on bad terms, and the iron and coal trades may be reported sound.

The Coal Trade, owing to the winter demand for domestic purposes, and the increased consumption at the furnaces, added to which may be noticed the preference now being given in the City and provincial markets to the production of some of the mines opened on the estates of the Marquis of Anglesea and Lord Ward, is exceedingly brisk: 13*s*. and 13*s*. 6*d*. per ton, are being required at the pits for good coal, which three years ago would have been purchased for about half the money. The advance, however, is frequently legitimate. There has been an enormous amount of capital expended in opening new mines throughout the district; and, until something like a return is made, prices must be upheld. The notices given by the men at some of the mills and forges have not been withdrawn, nor are they likely. "Ironmaster," writing in the *Worcester Journal*, and who may be taken as no small authority on any point connected with the trade, does not venture to more than "hope and trust the men will not be so unreasonable as to demand an advance of wages." Now, my only hope and trust is they may not be compelled to demand it, in consequence of the enormous high price of provisions. It is quite true they have been paid at the rate of 10*l*. and 11*l*. per ton for bars, but 9*d*. for the quarter loaf—a fearful prospect of an advance upon that price, all things else in proportion, materially alter things; and the sooner this altered state is boldly looked in the face the better it may be for all parties. And now, with respect to the manufacturing department, for I have been writing alone of the raw material. It would be absurd to say we are all buying and selling and living by the loss, but I believe we cannot meet one out of every ten engaged in manufacturing pursuits who will not say that the prices of finished articles bear no proportion to the price of the raw material. I have before me a long list of articles which might be placed in the category of the depressed, but as their turn may come to-morrow, there is no use in still further depressing them by particularising.

In the Copper Trade, there is rather a turn of some sort. The quantity coming into this market is said to be unusually large; and what appears a curious rumour in connection with the supply is, that we are by some means enabled to obtain the benefit of Russian copper. How it is of course we do not know, but so it is that the loss which we seemed to regret at the commencement, as a consequence of the war, has been now supplied in the heart of it. Our manufacturers are watched with the utmost vigilance, so that they cannot send away an ounce of wire, iron, or any conceivable article of war, out of England for the northern ports, from which the Czar could carry them to any of his arsenals, and yet we can get his copper, at a reasonable price. It is strange, but so it is, says rumour. We have also a large supply from Australia, and some considerable consignments are reported in the docks at Liverpool for our dealers in this town.

Since writing the above, I perceive by the *Globe* of to-night, which, of course, makes the best and least of it, that the Bank of England has decided upon the dreaded 6 per cent. discount. It is, I suppose, the result of necessity, but if it be merely to prevent over speculation in trade, never was there a greater mistake on the part of the directors. In the absence

of a knowledge of the real cause, we are to hope it is no worse than what is usually termed the "salutary check."

Mr. Isaiah Vernon, of West Bromwich, has, during the past week, specified his patent (through Mr. Geo. Shaw) for improvements in the slide-valves of steam-engines:—

This invention consists of a method of constructing the slide-valves of steam-engines, whereby the pressure of the valves upon their beds or seats may be wholly removed, or diminished to any desired degree. Instead of making a fixed back to the slide-valve, the inventor substitutes a detached back, which bears against the valve, pressing it to its bed or seat. The detached back does not move with the valve, but the valve moves between its bed or seat and the detached back, as between two fixed surfaces. A pipe connected to the detached back of the valve is furnished at its end with a flange, which constitutes a piston, working steam tight in a cylinder surrounding the said piston. The steam, in entering the said cylinder, passes through the slide-valve, detached back, and the before-mentioned pipe; the pressure of the steam on the before-mentioned piston is transmitted through the pipe to which it is attached to the plate or detached back, and the detached back pressing upon the slide-valve keeps it to its bearing on its bed or seat. By making the area of the piston attached to the before-mentioned pipe, larger or smaller, a greater or less amount of pressure may be transmitted to the plate or detached back, and made to press the slide-valve to its bed or seat. The arrangement of the induction and eduction pipes do not differ in any essential respect to those ordinarily employed.

IRON AND COAL TRADES OF YORKSHIRE AND DERBYSHIRE.

[FROM OUR CORRESPONDENT IN CHESTERFIELD.]

OCT. 18.—The advance of the rate of discount by the Bank of England has had the effect of checking the extreme buoyancy of the iron market; although, in consequence of the legitimate demand which exists, no reaction has occurred, and bars may be quoted at 9½. 10s. at the works. Many makers of second-rate brands in Staffordshire are selling below this, although the Scotch iron commands from 9½. 10s. to 10½. per ton. From the shipments to the north of Europe being expected to terminate shortly, there are not so many orders given for the Continent as were received some weeks ago; this, however, is more than compensated by the demand which has set in from other quarters of the globe, and the makers of malleable iron in Yorkshire and Derbyshire still continue to be very well employed.

The Coal Trade is active, and in some collieries an advance in price has taken place. The colliers appear to be satisfied with their wages, and the coal districts of Derbyshire particularly are remarkably quiet as regards the question of wages. In the South Yorkshire coal field there have been one or two "eruptions" respecting the rate of pay, but there has not been anything like a general turn out, or any movement calculated to interfere with the usual regular course of trade. We learn with satisfaction that it is the intention of the coal and ironmasters of South Yorkshire to establish a mining school in a central town in the southern division of the county, somewhat on the principle of those already in existence. Earl Fitzwilliam, who is a large colliery proprietor, has been solicited to become its president; and from his general willingness to forward any movement calculated to improve the educational condition of the community, and particularly that part of it engaged in mining, we doubt not that the project will receive substantial support from the noble earl.

The Steel Trade is comparatively inactive; and in the lead mining districts there is nothing new to report. Indeed, the absence of any feature of particular interest renders our communication this week necessarily short. We may add, that speculation seems to have received a check, owing to the critical position of monetary affairs. The opinion is strongly gaining ground that unless a speedy alteration takes place in our system of currency, we shall feel very severely the effects of the banking screw.

THE METAL TRADES AND INDUSTRIAL PROGRESS ON THE CONTINENT.

[FROM OUR PARIS CORRESPONDENT.]

OCT. 18.—In our Metal Market, there has been a slight fall in prices during the week, although the amount of business doing has not diminished to any extent. In the warehouses the prices are still maintained, and for some descriptions of manufactured iron even advanced rates have been obtained, but it cannot be expected that this state of things can continue, if the raw material lessens in value. Pigs for fusion are very dull; No. 1 Scotch are offered at a somewhat lower figure than they have been, but there is comparatively nothing doing in them. At Bordeaux, the imports of English iron have been pretty considerable, by a house who secured them when the prices were much lower than at present, but there are some complaints as to quality. At Charleroi, the local journal states prices to be firm, and the activity of the trade to continue. The laminaires and manufacturers are full of orders, and the ironmasters of the district anticipate great advantages from the opening of the railway from St. Quentin to Equennes. There is a rumour that several of the larger firms intend following the example set by the Providence Company, in establishing offices at Paris: this company declared a dividend of 4½. 4s. per 1-5500th to June 30, and the majority of the metallurgical establishments are in an equally favourable condition. The price of ore continues high. At Liège, the transactions in all descriptions of iron are as numerous as ever. At Namur, on Saturday, a meeting of ironmasters took place, but the attendance being very limited, it was considered inexpedient to confirm the proceedings of the previous meeting. Several influential members of the body were in favour of a rise, but the question was adjourned until the meeting on 27th inst. The proposition will there be discussed, and most likely carried. Charcoal iron is very scarce, indeed it is impossible to obtain it except in small parcels. In other metals no change.

Messrs. Maitland and Co., of Rue Neuve-des-Capucines, state that Napoleon Dock shares continue to be dealt in, and attract much attention, but in Crédit Mobilier the transactions are very limited. The Crédit Mobilier is an establishment formed for aiding the development of existing and the formation of new companies, and for bringing its bonds upon the market in place of the bonds or shares of other companies, which are thereby to be gradually withdrawn from circulation. Thus far the Crédit Mobilier is much on the same system as that proposed in London some years since, for preventing the enormous fluctuations in the price of English mine shares, the object being to withdraw all but their own stock from the market; but the company is also a deposit bank for every description of shares, receives money on accounts current, and is empowered to act as agents and bankers for all public companies, to receive payments on their account, and pay their dividends; whilst, to ensure a faithful fulfilment of the business it undertakes, it is under a strict surveillance of the Government, being compelled to furnish the Minister of the Interior, the Tribunal of Commerce, the Chamber of Commerce, the Prefect of the Seine, and the Prefect of Police, with a statement of their actual financial position. The Minister of Finance can also demand at any moment a like statement, and is empowered to examine and test the veracity of any document in their possession. Any profit that may arise, after payment of 5 per cent. as guaranteed interest to shareholders, and 5 per cent. of the remainder to the reserve fund, is distributed—10 per cent. to the directors, and the remainder as dividend to the shareholders.

The Société Anonyme du Charbonnage des Houilles grasses du Levant d'Elouges (Levant d'Elouges Coal Company) interest of 1½. has been payable since Monday. The Phoenix Mining and Smelting Company (anonyme) have convened an ordinary general meeting for the 30th inst. at Unter-Sachsenhausen, Cologne.

TEES-SIDE IRON TRADE.—The Stockton and Hartlepool Mercury of this day, says:—"Owing to the high rate of discount in the money market, pig-iron has again slightly declined, mixed numbers being quoted at 78s., but no one at all acquainted with the trade will suppose that prices will this year reach 70s. This supposition is a life in Scotland, but we think without any foundation. How can it be? Stocks there are none; and it is well known that this year's make is all sold. We have no sympathy with those people who always look at the gloomy side of the picture. There can be no doubt but speculators anxious to buy are ever prepared to pay anything calculated to lower prices, and to take advantage of the rumours they have set afloat. We advise that such reports be regarded cautiously. Shipments, foreign and coastwise, are being made with avidity, so much so that freights have gone up 10 per cent."

THE COAL TRADE.—Coal freights from this port to the Thames are now quoted at about 9s. 6d. per ton. Considering the enhanced cost of every article in use on board, and the high rate of seamen's wages, the above rate, at this season of the year, cannot be considered too high. The prices of the best household coals ruled during last month at from 22s. to 23s., which rates are several shillings below those realised in the same month of last year. The market continues steady and healthy, and an active trade is anticipated for the winter months.—*Sunderland Herald*.

SALES OF LEAD ORES.

RETURN OF LEAD ORE SOLD DURING THE QUARTER ENDING THE 29th SEPTEMBER, 1855.

Mines.	Tons.	Amount.
Messyrewddu	756	£11568 0 6
Lieburne	630½	9271 10 8
East Wheel Rose	586	8533 6 6
Musers	460	7132 0 0
Foxdale	400	6352 10 0
Wheel Mary Ann	383	6188 2 6
Cwmystwith	303	3873 6 0
Wheel Wrey Consols	272	4764 3 0
South Tamar	210	4653 0 0
Newtonards	206	3951 3 0
Luganure	310	3876 3 0
East Darren	203½	3459 7 10
Messyfa	225	3314 7 6
Yale of Towy	253	2830 13 1
Wheel Exmouth and Adam	210	2513 7 6
Deep Level	163	2306 10 0
Cefn Brynno	148½	2315 18 7
Westminster	153	2296 19 0
Laxey	100	2155 0 0
Trevelth	88	2111 17 0
Cotia Llys	115	1805 0 6
Wheel Trelawny	115	1723 6 6
Great Wheel Baddern	115	1680 4 0
Bwlch Consols	102	1607 15 0
Rhoswydol	101	1473 12 3
Dyffrynwm	96	1426 10 6
Dylife	93	1404 17 6
Cubert United	80	1404 12 6
Ivybridge	81	1322 7 6
Cwm Erfin	76½	1270 4 4
Tamar	57	1161 7 6
Llanerchyr-Aur	66	1088 6 6
Welsh Fote	60	915 10 0
Talcor	25	973 5 0
North Wheel Trelawny	68	888 14 0
Nether Wheel	65	861 5 0
Herodfoot	50	795 0 0
Aberffrawd Gothic Mine	60½	791 1 6
Round Hill	56	783 11 0
Swanpool	78	776 6 6
Kirkcudbright	58	712 19 0
Kewick	40	667 12 6
East Black Craig	40	671 0 0
Taliesin	40	651 0 0
Goginan	35½	590 9 2
Bwlch Gwyn	40	601 10 0
Holywell Level	38½	597 8 3
Brynford Hall	35	535 0 0
Caylan	50	518 2 3
Egair Mwyn	33	498 15 0
Llanrwst	31	462 16 0
North Wheel Friendship	32	447 4 0
South Manx	30	438 15 0
Chirk Castle	28	389 7 0
Cae-Cynon	25	388 2 6
Penrynblas	26	385 2 6
Aberdovey	28	380 0 0
Pantymwyn	25	379 2 6
Speedwell	28	378 13 6
Tassan	26	358 17 0
Darhew	24½	353 7 8
Wheel Whitehead	21	334 12 0
Brynsteddod	24	342 12 0
Rhiwirth	20	335 0 0
Caulan	22	315 3 0
Foxpath	25	312 10 0
Hope Valley	21	291 7 6
Caeonroy	17	288 13 6
South Bog	17	240 19 6
Medlyn	20	240 2 0
Wheel Carpenter	18	200 2 0
Stedford	15	197 2 6
Orsedd	15	196 7 0
Bryngwion	10	153 0 0
Carnack Dewa United	15	150 0 0
Basset Graze United	10	129 5 11
North Towy	10	120 0 0
Bronfryd	7	101 3 0
Fen-y-Gelli	7	100 12 6
Cander Mawr	7½	83 5 6
Tylwyd	6	75 0 0
Ty-Maen	5	62 10 0
Black Craig	4	51 0 0
Total	8847½	£134,456 1 11

PROBABLE EXTENSION OF PAPER CURRENCY.—The Bank of England, on Thursday, advanced the rate of discount from 5½ per cent., as fixed on the 4th inst., to 6 per cent. upon a 60 days' bill, and a 7 per cent. for those above that period, when not exceeding 95 days. This proceeding may have been attributed to the diminution of the stock of gold in the coffers of the Bank of England; to the conduct of the Bank of France in a like advance; to the deficiency of 3,500,000 quarters of wheat, as well as of rye in that country; to loans, or various other causes. Let conjecture exhaust itself, and the fact will still remain,—war alone is the occasion; and while war continues, payments must be made in specie; therefore, what assurance can be given that the same rate of discount, or even higher, will not be reached which followed the railway panic, as in the year 1847, when it stood charged at 8 per cent., the stock of bullion being reduced to £3,12,691? If a progressive advance of ½ per cent. in discount by the Bank of England upon the diminution of £700,000, or 800,000, of gold, as withdrawn, has failed to accomplish a sufficient remedy for the drain, what further means have the Bank of England remaining either to check the efflux of gold, or to compensate for the evils and prejudice which the governor and company have entailed upon the mercantile and trading interests of the country? Under the emergency of existing pressure, even after the "screw" having been put on to the full limit of its power, shall we be subject to the application of the half a turn more? If so, the question will then arise—what does discount mean? This may be replied to by answers which will bear as many explanations in the arbitrary meaning of that term as the instances in which discount is asked or given. Discount implies necessity, occasioned by the utter inadequacy and total insufficiency of the circulating medium, or specie currency, of the United Kingdom, to meet the requirements or demands of its commercial, manufacturing, productive, and trading interests. To partially atone for this deficiency, limited paper currency is resorted to, which, of itself, being wholly inadequate to meet the exigencies and emergencies of the trading community, expediency has suggested the use of a more extended paper currency, limited only by credit, which, in the commercial world, appears in the shape of those very bills that now, upon almost an *ad valorem* principle, the Bank of England are prepared to discount, even with the representative value of a specie currency by their own paper. If a paper currency is expedient for one department of trade, it certainly must be so for another. If the bullion is abstracted from the Bank, its deficiency surely must be compensated for by the use of more extended medium of commerce, which the circulation of 17. and 22. notes now will speedily supply. Whenever the circulating currency of a country is sufficient for its own requirements, it signifies but little to what extent the stock of bullion is diminished; but the moment that the means of interchange become restricted, uneasiness will always arise in the public mind, and a liability then ensues of a recurrence of those disastrous panics which too frequently have disturbed and agitated the equilibrium of our monetary systems and arrangements. Let the rates of discount advance, and then restricted means will become more limited; advance the rate of interest to an undue extent, and prices will rise in every department; enterprise will become utterly prostrated; depreciation of railway, mining, as well as of all speculative properties, undertakings, and investments, will follow to a corresponding extent. It has frequently been enquired, why the Limited Liability Act has been all but an abortive measure, when such results were anticipated from the benefits its enactments proposed to confer upon the commercial world? The reply is suggested by the establishment of a progressively increasing rate of interest. War prices certainly will advance, under these circumstances; and the costs of the war, enormous as they are, will, consequently, be augmented, which extra charge interest alone must occasion, ultimately this charge must fall upon the Government, and assuredly to re-appear under the guise of direct taxation; from which, as well as many other attendant and accumulated evils, little relief can be obtained, other than that which can be directly realised in the extension of the paper currency to a degree which will be equivalent to the requirements of the trading and commercial community.

According to the returns made up to Saturday last, the stock of bullion in both departments of the Bank amounted to 11,762,421½, being a decrease of 526,860½, which, continuing, will justify the advancing scale of interest even to 8 per cent., according to the progressive diminution of each 750,000, or 800,000, of gold, until the amount which remained in 1847 shall be attained. In 1814 the amount of bank and private notes

was 47,501,000½; then the bullion in the Bank amounted to 2,097,680½. In September last the Bank note and private circulation was 26,469,740½, with 11,732,421½ gold now in the coffers of the Bank of England.

SALE OF MINING PROPERTY, BY AUCTION.

CROOKHAVEN MINE.—This valuable property was submitted for sale, by auction, by Mr. C. Warton, at the Mart, on Wednesday, by direction of the committee of management. The auctioneer begged their attention to a description of the property. It is situated in the parish of Kilmea, county of Cork, in a fine mining district, in the peninsula of Crookhaven, which is bounded on the north by the Atlantic, and on the south by the large and commodious harbour of Crookhaven. Mr. Warton then fully described the extent of the sett, and the amount of operations, as inserted in our Journal of the 13th inst., adding that all the buildings, outhouses, dressing-floors, and machinery, had been arranged with such scientific skill, and were of such perfect and complete character, that they give to the whole property the features of a model, the capital expended amounting to about 10,000. He assured the company that the description he had given of the property was not exaggerated, and every 1½. expended had been judiciously laid out. The machinery and materials were all in a substantial state, and of the best description. The whole of the property would be sold without the slightest reserve, and, after the fall of his hammer, would pass from the present shareholders to the bidder. The reason for the sale was stated in the particulars, which was the inability of some of the shareholders to contribute sufficient capital to develop the mine—in fact, a number of the shareholders were willing to go on, but were fettered by others. The property was held by the vendors under a lease for the term of 30 years and 5 months from Jan. 1, 1852, subject to the royalty of one-twentieth of the ores and other substances obtained from the mine, or (at the option of the lessor) one-twentieth of the net proceeds of the sales of the produce of the mine, so long as such one-twentieth shall exceed 12½. 10s. half-yearly; but, when it does not exceed that sum, at 12½. 10s., to be paid every half-year; and is renewable for 31 years, at the lessee's option, upon payment of a fine of 1000£; so that, in fact, it might be held in perpetuity, as that amount every 31 years was of no consequence, if it were a valuable mine. The lease also contained a power for the lessees to determine it at the end of the first five years, or of any subsequent year, upon giving eight months' previous notice in writing. He had that morning received information that there was nothing in the aspect of the mine unfavourable—indeed, he had received some splendid specimens of copper ore from the Brow Head Mine adjoining, taken out of the 53 fm. level, and containing 60 per cent. of copper; and they and he had every reason to believe that at Crookhaven, when they got to the same depth, they would have the same lode. [Mr. Warton exhibited some beautiful specimens of the ore from Brow Head, which was minutely examined by the company.] Although 10,000£. had been laid out in machinery, there was nothing done that could have been dispensed with; and, as they knew, in Devon and Cornwall they only got 4½. to 5½. per ton for their ores, whilst the specimens just produced were worth from 40£. to 50£. per ton. He thought that, as there was everything on the mine, it was certainly a fair speculation, and, in all human probability, would soon become remunerative to the purchaser. Mr. Warton, having read the conditions of sale, which were of the ordinary description, and assuring them that the sale would determine the future ownership of the mine, the bidding commenced at 1000£, and, after a very spirited competition, the property was sold for 2500£.

HOLMBUSH MINES.—Mr. Warton next submitted for sale 25 shares in this mine, and observed that the proprietor was compelled to dispose of them in consequence of having entered into a business in which he had agreed to have no transactions in any other speculation. They were sold at an unfortunate time, as he was certain the important improvements were not generally known. The quality of the ore as they went down had become so rich, that it was fully expected the company would soon resume the payment of dividends. The machinery was some of the finest in Cornwall, and if his client had not been bound to sell, he should certainly have advised him to keep them. The mine had entered into a new phase; in the 110 fm. level they were obtaining rich ore, and he would remind them the purchaser of these shares was entering an adventure upon which immense works had been done. They had gone through a course of granite for which they had to pay 100£. per fm., and had been rewarded for their perseverance by meeting with a rich lode. The shares were put up in three lots, one of five, and two of ten shares, subject to a call of 1½. per share already due, and a similar call which will be due on the 17th Nov. next. The whole of the lots realised 5½. per share.

WHEAL TREVENEN.—Mr. Warton then put up 60 shares in this mine, which is situated near Helston, Cornwall. He stated that they belonged to the same proprietor as the Holmbush shares, and were submitted under the same circumstances. The principal point to which he would allude was that at the former working of the mine, from 1801 to 1814, they found tin in abundance. The first ten shares fetched 20s. each, and the remainder 17s. 6d. each.

NORTH TAMAR CONSOLS.—Mr. White submitted for sale, by auction, at the Mart, on Tuesday, this mine, situate in the parish of Beerfords, and county of Devon. The property was put up in pursuance of a resolution passed at a special general meeting of the adventurers, and the lot included the machinery and materials, amongst which were a new 24-inch cylinder steam pumping-engine, capstan, shears, and whim, a quantity of smiths and miners' tools, 40 fms. of pitwork, complete, &c. The mine adjoins on the east, and lies parallel to, the Tamar Consols, East Tamar, and South Tamar, valuable silver-lead mines, in a district of well-known celebrity, and proved to be one of the best for lead mining in the West of England. The auctioneer described the sett as held from the Earl of Mount Edgumbe, for 21 years, from Midsummer, 1850, at 1-15th dues, and is very extensive, being a mile in length on the course of the lode. The shaft has been sunk 44 fms., and three levels driven north and south, and with a comparatively small outlay the mine might be made a productive one. After some competition, the property was sold for 1200£.

LIMITED LIABILITY ACT.—CAUTION TO THE PUBLIC.—Let not anyone imagine he is safe in embarking money in a new scheme under the above Act from losing more than all the cash so risked; as, if a creditor can prove that the Act has not been complied with, it would become similar to a concern under the old law, by which every one is liable to his last farthing. The character of the promoters ought, therefore, to be more rigidly investigated than ever, as I see some of the directors of the gold companies trying their hand in new concerns with the above catching heading. The Act must be amended next session, as the present facility offered is nothing but a delusion. To comply with its requirements costs nearly 120£., and many solicitors would charge much more. It is hampered with restrictions, as all the new concerns are to be formed and regulated under the Joint-Stock Companies' Act. What the public want is power at all times to inspect the books of concerns in which they are partners.—H. GUEDELLA.

SALTPETRE.—The market for saltpetre, during the week, has exhibited much firmness, and many parcels have changed hands at extreme prices rates. Dealings altogether have manifested a reaction from the inactivity which had previously prevailed, and prices have indicated an upward tendency. For some time past refiners have refrained from making purchases except to supply immediate requirements, and hence quotations have remained unaltered; but the gradual decrease of stock, coupled with an active demand from America and for war purposes, have rendered a further improvement inevitable. By many a rise was fully expected, and would, probably, have been demanded, but for the favourable advice received by the last Overland Mail, representing the shipments to have been 602 tons, against the month of August. The deliveries from the warehouses have been 5800 tons. From 300 tons in the previous week; the stock on hand amounts to only 5800 tons. In recent American despatches, we learn that powder and saltpetre have risen in Russia enormously, in consequence of the vast quantities of the former used in the Turkish war. The result is seriously felt by all the mining interests of the United States, owing to the difficulty experienced in procuring the requisite supplies for blasting purposes, and the additional expense of 400 or 500 lbs. of Messrs. Harlowe and Co.'s mills, near Brighton, U.S., in a measure tended to enhance the difficulty. There may have been \$1500 worth of powder destroyed, to say nothing of stock and machinery. It was reported that the proprietors expected to close their operations in a few days, they being unable to procure saltpetre to carry on their operations. The demand for Russia has caused it to advance in price 43½. per cent. in the last 60 days, and Russian agents in New York and Boston brought by sample all that will arrive this year from Calcutta. It is said that there is but one powder-making establishment in the United States that has stock to the result of the Eastern war, and they must close them or sooner, and await the result of the Eastern war, until the close of all the Russians for that indispensable ingredient for powder, saltpetre. Most of this article is brought from the East Indies, but it is not generally known that it is also a product of the United States, being found in Franklin County, Missouri, where there are extensive caves, abounding in crude nitre. In times past these deposits have been used, as during the last war, to work them into saltpetre, a more healthy tone will take the place of the present uncertainty and doubt.

IRON MINING IN NEW SOUTH WALES.

In consequence of the favourable reports from the Pitt River Iron and Coal Mines, at Mittagong, about 80 miles from Sydney, on the Goulburn or great southern road, considerable interest is felt as to the ultimate success of the undertaking. It has been estimated that the entire cost of turning out the ore and manufacturing it, at Mittagong, into bars for market would not exceed 4s. per ton, whilst the selling price at Sydney of bar-iron was 18s. per ton; so that, after payment of expenses of carriage, a large profit would be derived, and yet the company would be able to sell much below that price. The directors had obtained permission of Government to avail themselves of the service, for a short period, of Mr. James Henry Thomas, resident engineer at Cuckoo Island, and his report fully confirms the opinions expressed by Messrs. P. J. Rothery, W. Keene, Hodgson, and Morgan, who have also inspected the property.

Mr. Thomas states that the "mine" is to be found in great abundance, and is of a very rich description. He was of opinion that the yield will be at least 50 per cent., or 20 per cent. more than the ores of England, and that it will not require calcination before smelting—a great advantage over those ores containing sulphur and arsenic. An abundance of water can be obtained on the property nearly throughout the year; and he says, "The quality of the iron and coal is as good as that of Great Britain; indeed, the former is superior, with the advantage of its lying near the water level, while those of England are sometimes 1000 ft. below the surface."

Mr. E. J. Rothery states that "The mine, as visible to the eye, covers an area of about 15 acres, and lies in a compact mass, on a gentle inclination, at the head of a valley surrounded by a succession of undulating lands, flanked by lofty and precipitous ranges, the Gibraltar Rocks standing several hundred feet above the level of the mine, at the distance of about a mile. The actual extent of the mine is supposed to be about 100 acres. To the geologist, this gigantic iron mound at once conveys the idea of some violent convulsion of nature, and it is evidently of volcanic origin, having been ejected through the carboniferous strata, which lies over this locality. An experienced eye will readily discover that this is not an ironstone, such as is ordinarily met with in mines of iron, but iron ore, having been subjected to some natural process, by which it has been relieved of the greater portion of its impurities. According to the description given in the assay of Mr. Morgan, mining engineer, the ore consists chiefly of a hydrated peroxide of iron, combined with which the oxides of several other metals present themselves, some of them singularly advantageous as alloys of iron, and sometimes added to iron, when required for particular purposes. From these and other indications, the mineralogist is led to the conclusion that the valuable ores lie concealed in close proximity. One feature of these ores is particularly striking—that is, they are readily reduced to the metallic state; and the earthy matter with which they are combined forms a glass or slag, without the addition of a flux. Mr. Morgan states that he had never met with ores where the earthy matter had so slight a tendency to enter into combination with the metal when reduced. According to an assay recently made by Mr. Hodgson, of Sydney, there exists about one per cent. of manganese, a substance constantly diffused through common iron in England to produce a finer description of metal. Nature has thus supplied these ores with very valuable requisites, and relieved the manufacturer of a great amount of labour and expense. By a naturally formed dike, entered from the bank on the road side, are reached various chambers, the flooring of which, to the depth of several feet, are composed of the richest oxide of iron, containing about 73 per cent. In many places it lies in equal purity on the top of the mass of ore, filling up the uneven portions of the surface of the mine. Thousands of tons of this oxide could be collected with a shovel. The greatest depth that has been gone to is 28 ft., the ore presenting itself in an unbroken mass the whole way down. This was effected about 20 ft. from the apparent edge of the mine; and in many places, where there is a sudden fall in the surface, the ore is laid bare, and appears as an immense wall of metal. In no instance has the bottom of the mine been arrived at. The whole appearance is that of a huge mound of iron, and conveys a strong impression that it exists to a very considerable depth."

From the value of ores, and the abundance of coal and other valuable adjuncts, it is considered that the importation of iron into the colony will at an early period cease, both as regards pig and manufactured descriptions.

An adjudication in bankruptcy has been made against Sir Robert Price, Bart. The case first came before the court under the arrangement clauses, Sir Robert having petitioned for the usual form. He is described as "Sir Robert Price, Bart. of Stratton-street, Piccadilly, and of Foxley, in the county of Hereford, and Member of Parliament for the City of Hereford, iron-manufacturer, and dealer in iron." In his petition for arrangement, Sir Robert states as follows:—"The inability of your petitioner to meet his engagements arises from losses sustained in the carrying on the trade or business of a manufacturer and seller of iron at the works or premises known as the Glamorgan Iron and Coal Company's works at Tondur, near Bridge End, in the county of Glamorgan."

THE MINES OF MEXICO.—A pamphlet was lately published in Mexico, under the title "Mexico's Foreign Trade since the Conquest." It contains some interesting statistical details respecting the produce of the gold and silver mines. The total value of the gold and silver coins struck at Mexico (the kingdom) from 1521 to 1851, together with articles made from the precious metals, amounts to \$3,562,705,000. In the city of Mexico the silver coinage amounts to \$2,248,165,000, and the gold to \$1,314,540,000, together \$3,562,705,000. The remainder is coined or wrought in the other towns of Mexico, but the whole of this colossal sum, with the exception of \$100,000,000, was exported. In the year 1690, the quantity of silver coined in the capital was \$5,280,000, and in 1691 it amounted to \$6,214,000. From 1691 to 1700 the quantity diminished, until it dwindled down to \$3,379,000. After this year it gradually increased again, till in 1809 its highest point was attained, the coinage for that year being \$24,708,000. In 1837 only \$516,000 in silver were issued by the Mint; but in 1838 it rose again, and in 1852 amounted to \$2,770,000.

REFORM IN RAILWAY CONSTRUCTION.—Under this head, we lately made some observations on the constant recurrence of railway accidents, and the probable cause of their frequency. Since then, we regret to see that other accidents have happened; indeed, it appears that the loss of life and property must continue as a necessary consequence of the present system of railway formation and management, until a radical change is effected in both. Improvements may be made if railway directors will pay attention to suggestions possessing real merit; if otherwise, and to disposition is shown for a better ordering of railway affairs, the British public, through their representatives, must take the initiative into their own hands, and signal to Government for means most conducive to the protection of life and limb. The first move may be to insist that double lines of railway be formed entirely for passenger carriages, and another for general goods traffic, the speed of both lines being regulated by statutory enactment, and being that the speed of the passenger line may be enquired, what can be done to improve present management? The first step is obviously to construct a permanent railway line; but this will never be accomplished as long as soft and perishable materials are used. This is a subject of the very first importance, both as regards a fair return of interest to the shareholders for capital invested, and the comfort and safety of the public, who it may be insisted have nothing to do with the question of expense, in accomplishing so necessary and desirable an end. Railway companies have driven all the coaches off the roads, and the public have a right to demand at least safety to their persons in this change of transport. In considering the means of meeting this requirement, we must enquire whether our directors in accomplishing so important a desideratum may also economize the cost of the construction of the roadway, by avoiding the constant wear and tear, and, necessarily, the labour of repair, and obstruction of the roadway while those repairs are going forward—a process always attended with more or less danger to the trains in passing over the line under repair. To accomplish this end, we again repeat that nothing less than an entirely new railway is required. It is by such a measure only that safety can be established, and the prospect of better dividends be secured. On the Newcastle and Carlisle Railway an improved sleeper or metal chair has been used, which it has been ascertained completely answers the expectations laid out, for, after the test of six years, the chair remains as perfect as on the day on which it was first laid down, thus holding out a sufficient guarantee of its perfect stability; and we find from enquiry we have made, that the portion of the line where this chair is used has required less attention from the plate-layers than the parts of the line where the old timber sleeper is laid down. It may be said that on lines where heavier engines travel at greater speed, the metal chairs are too light; but this objection does not affect the value of the mechanical principle of this valuable chair; for, in order to maintain the weight of the chair, it is only necessary to increase its dimensions to fit it for any railway, whatever may be the weight, speed, or quantity of traffic. An important feature in this patent chair, is the bearing and stability it gives to the rail, thus preventing friction and disunion of parts. Where deflexion takes place, friction and disunion of parts will occur, and the working of the rail must necessarily progress to the point of danger. The chair in question is brought perfect from the foundry, and ready to be used: there is no preparation necessary, and it is laid down with the greatest precision and rapidity, thereby saving much expense in the labour of time. No time can be estimated for its durability; but, from natural inference, it may be considered that its material, outlasts the material of the way formed of timber, whatever process it may undergo to insure its preservation. Sooner or later every material save iron must inevitably be discarded. But let us enquire how the present process of timber formation is carried out. The timber sleeper, we believe, has become both scarce and expensive. On some lines it has first to undergo the cost of preparation by a chemical solution. We perceive that on the North-Eastern line the sleeper is saturated in pitch, and the effluvia consequently emitted is most disgusting and offensive to the passengers. The next process is the fitting of the chair to each end of the sleeper; after that the securing of the chair upon it by cross spikes, which latter, in time, work out of the holes, and not unfrequently may be extracted from the sleeper by the fingers. Next comes the placing and adjusting of the sleeper upon the roadway, employing the manual labour of several men; and then follows the constant attention and inspection of plate-layers to keep the sleeper to its proper bearing. When all this is accomplished and the sleepers are covered with ashes, the roadway is complete; but as ashes have a tendency to rot the sleepers, the plate-layers are constantly employed in renewing them. Then, where the sleeper is not covered, there is great risk of its being set on fire by the fall of hot cinders from the engine in passing along the line; and the sleepers being saturated with pitch, combustion readily occurs, and the sleeper is destroyed. Passengers little know the danger they incur from this cause alone. It is not very long since that a sleeper took fire on a line in this neighbourhood, and blazed up for several feet; fortunately, it was not in the night, and, being soon discovered, the flames were extinguished by a ready application of water. Gunpowder would be rather an awkward commodity to carry under such circumstances. There is a further objection to the transverse timber sleeper, in case the train is thrown off the rails, the wheels of the carriages, running over the sleepers, not only greatly damage the rolling stock, but imperil the passengers. This is obviated by the block chair, as the train may pass along the line comparatively in safety, till it is brought to a stand, without any of these consequences taking place. The public will judge between the two modes of formation; because the more substantial railways must be constructed of iron. The first cost of a metal sleeper may be more than a timber one, but it is very evident that, ultimately, the metal sleeper will be the less costly of the two; and, therefore, it is the interest of railway companies to adopt it. The public have no objection to it, as it is a safe and durable one, because the less liable it is to get out of order, the greater safety there will be, and the nearer it will approximate to perfection. The prejudice in favour of old applications are obstinately persevered in, to the exclusion of the material that will make the most durable, and, therefore, the best and safest line, and should directors continue so indifferent as to give way to those prejudices, to the damage of their own and their constituents' interests, the general body of shareholders must take the matter into their own hands, and appoint servants who will be more obedient and controllable in submitting to the safety and ability of the line, and the securing the travellers upon it from the constant repetition of frightful accidents. This subject is of such importance that we shall not lose sight of it, but return to it as occasion and opportunity offer. —Northern Examiner.

WEEKLY LIST OF NEW PATENTS.

APPLICATIONS FOR PATENTS, AND PROTECTION ALLOWED.
P. A. le Comte de Fontaine-Moréau: Forging iron.—M. Atkinson and B. Ridge: Steam-boilers, &c.—J. Newman: Railway wheels.—J. T. Pittman: Screw-wrench.—R. Mobey and G. L. Scott: Boilers.
WEEKLY LIST OF PATENTS SEALED.
A. E. L. Bellford, Essex-street, Strand—Pumps.
J. Black, Hampstead-road—Axles, shafts, and bearings.
S. Draper, Lenton, near Nottingham—Apparatus for retarding and stopping rail-
J. Coulson, Penzance—Apparatus for ventilating mines, which improvements are also applicable to other purposes where ventilation is required.
E. L. Allen, Strand—Steam-engines.
C. L. V. Maurier, St. Etienne (Loire)—Carbonising coal, and in apparatus to be em-

IRON MANUFACTURE.—Mr. I. Rogers, of North Haverstraw, New York, has patented some improvements in the mode of treating iron ore. This invention consists in the use of a revolving drum rubbing cylinder, heated to the required degree by a reverberatory or other furnace, into which cylinder the ore is introduced in a pulverised state, with a sufficient admixture of carbon to combine with the metallic oxide while heated and mixed in said cylinder, away from contact with the atmosphere, so as to deprive the ore of a portion of oxygen, that passes off as a vapour combined with carbon, while the carbonic acid drives away from the end of the cylinder into a furnace to be melted.

GRINDING AND PULVERISING MACHINE.—Mr. Goodall, chemist, Derby, has patented a machine, the simplicity of construction and adaptability of which recommend it in all cases where fineness of substance is a desideratum. The invention consists in the application of mechanical power to the production of compound or rotary motion, whereby the operations of grinding or levigating are performed by the aid of a pestle, instead of rollers or flat grinding surfaces. The materials to be powdered are placed in a mortar, in which a vertical shaft or pestle is made to work in such a manner as to induce the same rubbing motion imparted by the hands, when substances are reduced by manual labour. The pestle may be weighed, according to the requirements of the case, and as it traverses over a different surface every time, it thus obviates the necessity of scrapers to keep the article constantly acted upon. A sifting apparatus can be added when required, so that the grinding and sifting may be carried on at the same time; and as the mortar is placed in front, no dirt from the friction of the wheels can possibly fall into it. Another advantage it possesses is, that the mortar and pestle can both be detached at will, whilst it may either be worked by hand labour or steam-power. Though originally intended to perform on a small scale what large stoves and runners accomplish on a large, the principle of the machine was found capable of greater extension, and the inventor, consequently, claims for it a more enlarged sphere of operation. As a drug grinder, its capabilities have been acknowledged, and it is said to answer admirably in breaking and pulverising slag; and Mr. Goodall is of opinion that it would prove most effectual as a gold or quartz crusher, as a stream of water could be run through the mortar, which would carry off the dirt and refuse when pounded.

HYDRAULIC PROPULSION ON RAILWAYS.—Mr. Jean Panet, of Echoville, in Haute Saône, recently obtained provisional protection for "an improved hydraulic system for propelling on railways," &c., which he describes as follows:—"The way" is constructed in the ordinary manner of existing railways, but between the two lines (the same tube serving for both), and along the entire length, a tube is sunk into the ground, at a depth of from 1 ft. 6 in. to 3 ft. This tube receives casings to receive smaller ones for the pistons by which the motion is given; these smaller tubes, again, are furnished with valves and levers. The principal tube is closed at its lower extremity, and at the other end is connected with a brook or river; making arrangements which give a pressure of several feet at the starting point, similar to those adopted at mines, and other places where a fall of water is required. It will be found that the water introduced into the tube exerts an equal pressure on every part of it, and gives the necessary power. The carriage is moved by the expansive force of the water contained in the reservoir-tube, and may be constructed with four or six wheels; it is furnished with two levers, four balances, and one slide for moving them. The levers are placed one on each side of the carriage, serving to regulate the opening of the valves; the levers and balances are arranged in pairs, and in such a manner that they move in an opposite direction, so that the speed can be regulated at will, and are fixed or movable by means of the slide; the balances receiving the pressure from the pistons, give the motion. The advantages to be derived are, that the water being the principal agent there is no fear of scarcity of propelling power, as it can be renewed in the course of the distance by introducing a fresh supply of water as often as may be deemed advisable. The water, after having been employed for propulsion, can be used for various purposes in those parts where it is scarce. But the chief advantages of the system are, that no fuel would be required, no explosions would take place, running off the rails would be extremely difficult, and there would be no need for the great weight usually required to make the wheels adhere to the rail, nor for so great an amount of strength in the rail as at present required.

LIGHTING.—Mr. J. Longbottom, of Leeds, has recently patented some improvements in combining atmospheric air with hydro-carbons, for the purpose of producing light and heat. The invention consists in causing the atmospheric air, which is to be combined with hydro-carbons for the purpose of light and heat, to be passed in contact with pumice stone, or other porous substance, saturated with caustic potash, and then to be passed in contact with pumice stone, or other porous substance, saturated with sulphuric acid, in order to free the air from water. The dry and pure air is then passed in contact with the hydro-carbon to be used, which, combining with the air, produces a compound suitable to be used in place of gas. The air is propelled through the process by bellows or blowing apparatus, and caused to pass into, and in contact with, the hydro-carbon employed in a divided or thin stream by means of a nozzle, and the combined matters then pass into a gasometer, from which they are supplied for use in like manner as gas. By passing atmospheric air through a bath of pumice stone, or any other suitable porous substance, saturated with caustic potash, for the purpose of absorbing the carbonic acid gas contained in the air, and then through a bath of pumice stone, or other suitable porous substance, saturated with sulphuric acid, for the purpose of absorbing watery particles or aqueous vapours, and thus thoroughly desiccating or drying the air, and fitting it for the absorption of the vapours of hydro-carbons, it is said to be rendered highly luminiferous, and well suited for all the purposes of which illuminating gas is susceptible.

RAILWAY CARRIAGE SPRINGS.—Messrs. Speed and Bailey, of Detroit (U.S.), by a new patent claim—"In metal, conical or dish-shaped disc springs, arranged in sets or pairs, one above the other, providing the splitting of the edges of the discs by expansion, and effecting free unbroken compensation or lateral play, for the radial elongation of the fibres, the spring is exposed to sudden or heavy compression, and insuring equality of elasticity with the discs, and making the discs with radial corrugations, and arranging them for operation together." The *Scientific American* makes the following remarks on this invention:—"The disc springs, to which allusion is made in the above claim, are simply common steel plates, resembling, in outward appearance, the saucers of common coffee cups. These discs are placed within a case or cylinder, the lower disc resting, like a saucer, on the bottom of the cylinder; the disc next above is reserved, or placed bottom up, its periphery resting on the periphery of the lower disc. In this manner the discs are arranged in pairs above each other, a plunger being fitted to the top of the cylinder, on which the weight to be sustained rests. It is plain that the elasticity of the disc thus arranged will be considerable, and that they will yield more or less according to the weight brought upon them. Disc springs of this kind have long been known; they are peculiarly adaptable to car springs, for they occupy no more space than the round India-rubber springs now in common use. But the trouble with the old fashioned disc springs is, that after being in use for a time they split and flatten out, thus losing their elasticity, and becoming worthless. The improvement of Messrs. Speed and Bailey consists in corrugating the discs, instead of having them plain, as heretofore. This invention adds new strength to the plunger, and entirely obviates the serious objections we have just named. It is plain that the improvement is a capital one, and that it has been practically tested, with entire success. It is well worthy the attention of railroad superintendents."

RAILWAY AXLES.—Mr. G. M. Miller, C.E., of Inchicore, Dublin, has patented some improvements in axles and axle-boxes of engines and carriages in use on railways, which consist—1. In fitting the cylindrical journals of axles with collar only instead of two, in order to reduce the friction. 2. In constructing axle-boxes so that the main portion of the same, and the step or bearing for the axle-journal, can be removed without lifting the carriage off the wheels. For this purpose the lower part of the axle-box is made open at the top, in order to receive the step or bearing, and that portion of the box which forms the upper grease chamber, or hopper.

POSTAGE STAMP, &c., AFFIXER.—Mr. George Beard, of Birmingham, has just specified his patent for a very ingenious apparatus, for affixing postage stamps, labels, &c. He states that his invention consists in an improved apparatus for setting or affixing in their proper places labels, postage or receipt stamps (of the label kind), previously gummed or cemented on the affixing side thereof. On a suitable sole plate is affixed a water box, with a cushion at top, and a sponge or other means of raising the fluid therein for keeping such cushion wet; above this cushion is a small reservoir, the water being kept in a suitable guide, and to be actuated by the pressure of the fingers. On the same sole plate there is another box, provided with a lock and key, such box being for the reception of the labels, tickets, or stamps. The last mentioned box is telescopic in character; that is, the outer, or upper part, slides over the inner, or under part, which inner, or under part, should have a lid, or top, for receiving the stamps or labels; beneath this lid is a spring, connected with the outer, or upper part, in order to bring it up to its work. Above the last mentioned box is also a platen at the end of a plunger, similar to that for the water box. Instead of having only one water box, and one label or stamp box, on the same sole plate, there might be two water boxes, and two label or stamp boxes, so as to contain labels, postage and receipt stamps, &c. In use, the part of the envelope, letter, sheet of paper, &c., to which the stamp, label, &c., is to be affixed is placed on the cushion; the plunger is then brought down upon it, in order to ensure its being properly brought in contact with the cushion and wetted, which being done, the wetted part is placed on the top of the stamp box, in which the labels or stamps are laid with the gummed surfaces uppermost, and its plunger brought down upon the same, whereby a label or stamp is set in or affixed to such envelope, letter, sheet of paper, &c. It may be stated that the water box, together with its plunger and platen, might be found useful without the other parts of the apparatus.

STANNATE OF SODA.—In order to procure a purer article than at present in use, which is employed as a mordant in print and dye works, M. Edward Haefliger, of Mulhouse, has lately been making several experiments, in the laboratory of Mr. Harrison Blair, near Manchester. With this view, a laborious investigation has been made of some of the compounds of tin with arsenic. The first process has been to pour an excess of nitric acid into a solution of stannate of soda, and bringing the mixture to a state of ebullition, a white gelatinous precipitate is produced, composed of arsenic acid, peroxide of tin, and water. The object to be attained was, whether in calico printing or dyeing the hydrated peroxide of tin alone would be preferable, to an arsenate or peroxide of tin. The various shades being more brilliant and intense than when arsenic acid is present, the practical fact has been ascertained, that the danger of employing arsenates may be remedied by the use of a purer stannate of soda.

The Mercantile Bank of India, London, and China, at their meeting at Bombay, on Aug. 17, stated the profits for the half-year at 17,040, and, after payment of a dividend at the rate of 8 per cent. per annum, a balance of 38781, was carried to the reserve fund, which now stands at 79107.

A meeting of the British Sperm Candle Company is called for the 30th inst., to confirm the resolution for dissolving the company.

EXTENSIVE SALE OF STEAM-ENGINES, BOILERS, MACHINERY, STOCK IN TRADE, LARGE STATED SHED, WEIGHT-BRIDGE, THE OFFICE FURNITURE, &c.

MR. GEO. C. HYNDMAN WILL SELL, BY AUCTION, at the ELIZABETH-STREET IRONWORKS, BELFAST, without reserve, on Wednesday, 21st November 1855, and following days, at Eleven o'clock, ALL the valuable and costly MACHINERY and STOCK IN TRADE, consisting of FOUR STEAM-ENGINES and BOILERS; puddled bar mill and squeezer; plate and angle iron mills; tilt hammer; roll turning lathe; shears; drilling and screwing machines; large wooden cranes; a great quantity of cast metal rolls; malleable iron plates and bars; cast metal plates; scrap iron and metal; brass; metal pump, with gearing and piping; a large and expensive slated shed, 140 ft. by 80, on 29 cast-iron columns, 15 ft. high, suitable for a railway station or public market; fire and common bricks; platform weigh-bridge; office furniture; turret clock; smith's tools; and various other utensils in trade. Catalogues to be had of the Subscribers, and sent by post to any address on receipt of two stamps; also at the office of this Journal. The premises may be viewed till the day of sale, by applying to Mr. Geo. C. Hyndman, auctioneer, 7, Castle-place, Belfast.—October 15, 1855.

RAILWAY TRAFFIC RETURNS.

ENGLAND.—Subjoined are the traffic returns of the various English lines for the last week:—

	1855.	1854.
London and North-Western	281,084	256,598
Lancashire and Yorkshire	20,294	19,290
London and South-Western	17,047	13,911
London and Brighton	16,599	15,414
Great Western	27,609	24,226
North-Eastern	34,970	33,879
South-Eastern	24,558	20,019
Great Northern	25,005	22,114
Chester and Holyhead	6,111	5,329
Manchester, Sheffield, and Lincolnshire	9,018	10,028
Eastern Counties, Norfolk, and Eastern Union	26,004	25,169
Bristol and Exeter	7,137	7,088
East Lancashire	5,872	5,873
London and Blackwall	1,330	1,392
Lancaster and Carlisle	6,260	6,260
Midland	30,174	28,512
Oxford and Wolverhampton	4,308	3,286
Newcastle and Carlisle	3,565	3,482
Shrewsbury and Chester	2,767	2,305
South Wales	6,013	5,590
South Devon	2,413	2,426
South Yorkshire and River Dunn	2,241	1,678
Taff Vale	5,380	2,352
West Hartlepool Railway and Harbour	2,812	2,403
Total	£347,449	£318,633

SCOTLAND.—The returns on Scotch lines are:—

	1855.	1854.
Caledonian	£11,724	£11,579
Edinburgh and Glasgow	5,468	5,462
Edinburgh, Perth, and Dundee	3,195	2,737
Glasgow and South Western	6,068	5,688
North British	5,586	5,062
Total	£32,033	£30,428

IRELAND.—The Irish returns are:—

	1855.	1854.
Belfast and Ballymena	£832	£1,083
Dublin and Belfast Junction	1,163	1,088
Dublin and Kingstown	1,929	868
Dublin and Drogheda	1,589	1,387
Great Southern and Western	6,917	5,610
Midland Great Western	3,972	2,926
Ulster	1,453	1,298
Total	£16,907	£13,980

RAILWAY TRAFFIC.—The traffic returns of railways in the United Kingdom for the week ending Oct. 13 amounted to 431,377, and for the corresponding week of 1854 to 391,107, showing an increase of 37,298. The gross receipts of the eight railways having their termini in the metropolis amounted for the week ending as above to 129,194, and for the corresponding week of last year to 175,842, showing an increase of 20,552.

The increase on the Eastern Counties Railway amounted to 8341; on the Great Northern to 28921; on the Great Western to 33827; on the London and North-Western to 44861; on the London, Brighton, and South Coast to 11454; on the London and South-Western to 31377; and on the South-Eastern to 43387; total, 20,411. But from this must be deducted 627, the decrease on the London and Blackwall, leaving the increase, as above, 20,552.

The receipts on the other lines in the United Kingdom amounted to 232,143, and for the corresponding week of 1854 to 215,599, showing an increase of 16,544 in the receipts on those lines, which, added to the increase on the metropolitan lines, makes the total increase 37,298, as compared with the corresponding week of 1854.

RATE OF INTEREST PAID BY RAILWAY STOCK.—The following statement shows the rates of interest paid, per annum yielded by ordinary railway stocks at present prices. The calculation is based on the dividends paid for the half-year ending June 30, 1855, and for the year ending with the same date:—

Railways.	Last half-year.	Last year.
Bristol and Exeter	£3 0 0	£5 0 0
Caledonian	5 0 0	5 0 0
Dublin and Belfast	5 12 6	5 12 6
Eastern Counties	4 14 8	6 1 0
East Lancashire	5 1 5	5 8 8
Edinburgh and Glasgow	4 0 0	5 0 0
Glasgow and South-Western	2 8 3	4 19 3
Great Northern	2 11 8	4 11 11
Great Southern and Western (Ireland)	5 0 0	4 10 0
Great Western	3 12 8	4 10 10
Kendal and Windermere	2 10 0	4 7 6
Lancaster and Carlisle	5 0 0	5 5 4
Lancaster and Preston	5 0 0	5 6 8
Lancashire and Yorkshire Stock	5 6 8	5 6 8
London, Brighton, and South Coast	4 10 0	5 7 0
London and North-Western Stock	5 8 0	5 13 1
London and South-Western	5 0 0	5 13 1
Midland Great Western	5 3 1	5 3 1
Midland Stock	5 9 4	5 13 3
Midland, Birmingham, and Derby	5 11 10	5 18 5
North-Eastern Berwick Stock	5 2 11	5 10 2
North-Eastern York Stock	4 8 10	5 5 6
Scottish Central	4 14 4	4 14 4
Scottish Midland	4 9 8	4 3 4
South-Eastern	5 0 0	5 8 9

WORCESTER AND HEREFORD RAILWAY.—A meeting of ironmasters, colliery proprietors, merchants, and others, of Newport, was held on Monday, to consider the propriety of assisting the Newport, Abercromby, and Hereford Railway Company to carry out the above undertaking, and thus prevent the forfeiture of the 42,000, lodged with the Government. Similar meetings have been held at Ledbury, Malvern, Worcester, and Birmingham, with considerable success. The chair was taken by Mr. S. Hounfray (the mayor), who briefly introduced the subject. Mr. S. Farquhar gave an account of the present financial position of the company, and after detailing the difficulties which they had had to encounter in obtaining their powers, appealed to the inhabitants of the district to support the measure. Mr. T. Brown, of Ebbw Vale, said they were fortunate in having parties to come forward and fill the gap made by the withdrawal of the London and North-Western Company. He was one of those who had taken upon themselves the responsibility of procuring the withdrawal capital (150,000), and he felt they must succeed. Taking Pontypool as an instance, the distance from that place to London was now 141 miles; when the Worcester and Hereford Railway was completed it would be 89, saving 52 miles. Mr. J. Brown (brother of the former speaker) followed, and concluded his address by announcing his intention of taking 100 shares. Mr. T. B. Batchelor took 50 shares, expressing his full concurrence in the operations of the company. A number of other persons expressed their determination to support the undertaking to the utmost extent of their power. A committee was formed to canvass the inhabitants, and the proceedings terminated with a vote of thanks to the Chairman.

CAPE TOWN RAILWAY AND DOCK COMPANY.—We alluded, in last week's *Mining Journal*, rather fully to this undertaking, and pointed out the great additional advantages, and chance of success, through the late valuable discoveries of copper mines in the Namaqualand district. The company was originally formed in the early part of 1854, but at that time it was only intended, in the first instance, to lay down a single line of railway, with sidings from Cape Town to Wynberg, through the towns of Stellenbosch and the Paarl, to Wellington; by this route the wine and corn districts would be easily accessible; and they then further proposed to extend it from Wynberg to Simon's Bay, and through Swartland, or by a coast line to Saldanha Bay, to be carried on to Swellendam, and the eastward, which would have commanded the most fertile and productive district in the western province. These plans, however good, have been superseded by the important mineral discovery to which we have alluded; and whilst it secures a certain profit to the parties embarking their capital in the railway, it will make a most important addition to the wealth of the colony, by enabling other capitalists to effectually develop the mines, which they are at present precluded from doing, through the enormous price charged for the carriage of ores to the port of shipment. The directors, we are informed, are awaiting, with some anxiety, the answer from the Colonial Government as to the amount of interest they will guarantee on the capital embarked in the undertaking.

RAILROAD PROFITS IN AMERICA.—Railroads in various directions, the present year, seem to be profitable beyond all previous time. We say seem, because all experience proves that no one can tell how profitable a road is, so long as it maintains a construction account. It is so easy to run current expenses into permanent improvements, and sometimes so really difficult to distinguish one from the other, that it is absolutely impossible to tell what the true profits of such companies are. But according to the published reports of receipts and expenditures, retrograding in almost universal popularity, as the following, a sample of nearly all others, will show:—The Rutland and Burlington road shows net earnings for eight months and eleven days of \$118,942. The Cleveland and Pittsburg road, for eight months, shows increase over corresponding time last year of \$55,452. The earnings of the Black River and Utica Railroad for the month of August were \$4011-84. The largest earnings of any previous month were \$2508, in July. The receipts of the Macon and Western road in August were \$30,505, against \$25,157, showing an increase of \$5251. The authentic result of eight months' traffic this year on the Southern Michigan road, shows an increase of \$366,181.—Philadelphia Ledger.

In accordance with the recommendation of the committee of investigation, the adjourned meeting of the Eastern Counties Railway Company, called for the 26th inst., is to be further adjourned to Dec. 7, when the committee expect to be able to present their report in full. This document is looked for with great interest.

CAPE TOWN RAILWAY AND DOCK COMPANY.

Incorporated by Special Act of Parliament (18 Vic., Sess. 1855).

FOR THE CONSTRUCTION OF SUCH RAILWAYS AND DOCKS IN THE COLONY AS THE COLONIAL AUTHORITIES MAY SANCTION. Under a Guarantee from the Local Government of a Minimum Rate of Interest at 6 per cent.

Capital £500,000 (with power under the Act to borrow £200,000 more). In 30,000 shares, of £20 each.—Deposit, 2s. per share.

No call will be made without the consent of the shareholders at a general meeting. Prospectuses and Copies of the Report of the Select Committee of House of Assembly at the Cape on Railroads, are now ready at the brokers, Messrs. CARMEN and WHITEHEAD, 2, Royal Exchange-buildings; the solicitors, Messrs. MALTBY, ROBINSON, and JACKSON, 7, Bank-buildings; and the offices of the company, 1, King's Arms-yard, Moorgate-street.

THE FOREIGN VINEYARD ASSOCIATION.—Notice is hereby given, that the ORDINARY GENERAL MEETING of shareholders of this company will be held at the office of the company, 51, King-street, Regent-street, St. James's, Westminster, on Thursday, the 25th day of October inst., at One o'clock p.m. precisely.

On the termination of the ordinary business, the MEETING will be made SPECIAL, for the purpose of considering and authorising certain alterations in the Deed of Settlement, with the view of bringing the company under the operation of the Limited Liability Act; also, of Clause 6 in said Deed, by substituting some other day for Thursday as the day for holding ordinary general meetings.

By order of the Board, THOMAS W. STAPLETON, Sec. 51, King-street, St. James's, Oct. 17, 1855.

[PROVISIONALLY REGISTERED.] GREAT WHEAL BUSY UNITED MINING COMPANY (LIMITED), KENWYN, CORNWALL.

In 6000 shares of £10 each, with power to increase. Deposit 50s. per share, and the remainder by calls of 25s. per share, at intervals of not less than six months.

To be worked under the "LIMITED LIABILITY ACT."

DIRECTORS.—GUSTAVUS EDWARD BECKERS, Esq., Warwick-road, Maida-hill, London.

STEPHEN BROAD, Esq., Peckham Rye, London.

JAMES COBBETT, Esq., Deptford, Kent.

RICHARD HUMPHREYS, Esq., 72, Wimpole-street, Cavendish-square.

ROBERT OFFORD, Esq., 53, Wigmore-street, Cavendish-square.

JOHN OFFORD, Esq., 4, Auburn-street, Plymouth.

C. R. READ, Esq., 98, Gloucester-terrace, Hyde-park.

With power to increase.

BANKERS.—Messrs. Martin and Co., 68, Lombard-street.

BROKER.—Joseph Davis, Esq., 75, Old Broad-street.

SOLICITORS.—Messrs. Wire and Child, 9, St. Swithun's-lane, City.

ENGINEERS.—Sims and Sons, Redruth.

OFFICES.—47, OLD BROAD STREET, LONDON.

Applications for the remaining shares must be made immediately to the broker, or the directors, in London; or the manager, Mr. J. B. PASCOE, Camborne, Cornwall.

COPIAPO MINING COMPANY.—Notice is hereby given, that the ANNUAL MEETING of the shareholders of this company will be HELD at the offices, No. 2, New Broad-street, on Friday, the 26th inst., at One o'clock in the afternoon. The business will be transacted at One o'clock.

London, Oct. 9, 1855. By order of the Board, EDWARD J. COLE, Sec.

CHANCELLORSVILLE FREEHOLD GOLD MINING COMPANY.—The Directors hereby announce to their shareholders the ARRIVAL of the Quicksilver, with 100 tons of GOLD ORE, the first consignment from their mines in Virginia. The tests made by Messrs. Johnson and Mitchell, Clarendon, Ryan, Wright, &c., justify the belief that at least 5 ozs. of gold to the ton will be obtained from this large importation.

By order, W. S. TROTTER, Sec. 1, Great Winchester-street, Oct. 1855.

CHANCELLORSVILLE FREEHOLD GOLD MINING COMPANY.—The Directors of the Chancellorsville Freehold Gold Mining Company invite TENDERS to CRUSH 100 tons of GOLD ORE, in quantities of not less than 5 tons. Tenders to be addressed to the secretary on or before the 20th inst. (this day).

By order, W. S. TROTTER, Sec. 1, Great Winchester-street, Oct. 13, 1855.

COLOGNE MINING COMPANY.—MORTGAGE LOAN.—THE INTEREST DUE ON THE PRIORITY DEBENTURES, issued by this company at 10 per cent. per annum, is NOW PAYABLE at their offices, 15a, St. Helen's-place, Bishopsgate-street, London, Oct. 16, 1855.

HODGKINS AND CO.

CULCHOTE COPPER MINING COMPANY.—Notice is hereby given, that an EXTRAORDINARY MEETING of the shareholders will be HELD on Monday, the 29th October inst., at the company's offices, No. 28, Poultry, in the City of London, at the hour of Two o'clock in the afternoon, for the purpose of authorising the raising of additional capital to the extent of £10,000, on the security of a mortgage of the company's property, to enable the directors to meet the present liabilities, and to provide for the future working of the mines of the company.

By order, JAMES SEAL, Sec. 76

CULCHOTE COPPER MINING COMPANY.—Notice is hereby given, that all SUBSCRIBERS to the Company's Stock who have not executed the company's Deed of Settlement, are required to EXECUTE such DEED at the company's office (between the hours of Eleven and Three o'clock) on or before Saturday, the 27th day of October inst., otherwise they will be deprived of all further interest in the company.

JAMES SEAL, Sec. 77

MOUNT CARBON MINING COMPANY.—Notice is hereby given, that a SPECIAL GENERAL MEETING of the shareholders will be HELD at the offices of the company, Cannon Row, 28, Green-street, London, on Wednesday, the 7th day of November next, at One o'clock, to take into consideration the present position of the company's affairs, and to determine thereon.

By order, ALFRED JEFFREE, Sec. 78

Dated this 17th day of October, 1855.

ANGLO-CALIFORNIAN GOLD MINING COMPANY.—Notice is hereby given, that the ANNUAL GENERAL MEETING of the shareholders of this company will be HELD at the Freemasons' Tavern, Great Queen-street, Lincoln's Inn-fields, on Wednesday, the 31st inst., at Twelve o'clock, for the purpose of transacting the ordinary business of the company.

By order, GEORGE F. GOODMAN, Sec. 79

11, Adam-street, Adelphi, Oct. 19, 1855.

AUSTRALIAN CORDILLERA GOLD MINING COMPANY.—SHAREHOLDERS AND SCRIP-HOLDERS are requested to MEET together on Monday, the 22d inst., at Twelve o'clock precisely, at the North and South American Coffee House, Thredneedle-street, as the office of the company is closed, and the books, which could a tale unfold, are missing. This cost-book company has never held a meeting, or published a balance-sheet, for three years. H. GUELLA, Oct. 17, 1855.

UNITY JOINT-STOCK MUTUAL BANKING ASSOCIATION.

APPOINTMENT OF GENERAL MANAGER.

The Court of Directors have to intimate that the final arrangements of the bank, previously to the commencement of business, are about being concluded.

The appointment of general manager has not yet been made. The Directors are now, therefore, ready to RECEIVE and consider APPLICATIONS from gentlemen of practical banking and commercial experience, capable of undertaking the responsibilities and duties appertaining to that important position.

The aim of the directors is to secure the services of a first-class manager, to whom they will be willing to give handsome terms. He must be a man of great energy, sound judgment, firmness in business, and thoroughly versed in all the necessary details incidental to the successful management of a bank.

It is necessary that applications should contain the name and address of the writer, together with testimonials as to experience, ability, &c., and be addressed to the Court of Directors, at the principal offices of the bank, Unity Buildings, 10, Cannon-street, City.

By order, HENRY LAKE, Sec. Principal Offices, Unity-buildings, 10, Cannon street, City, Oct. 13, 1855.

LAKE OF HAARLEM.—The Dutch have brought their tremendous task of draining the Lake of Haarlem to a close, by the sale of the last parcels of land reclaimed. By pumping out the water they gained 20,000 acres of excellent land, which sold for 2,000,000 fl. The cost of this work was 10,000,000 fl. In a few years all the outlay will be repaid, and a handsome profit will accrue. This success has revived that often debated question, the drainage of the Zuyder Zee.

NEW COLLIERY IN RHONDDA FAWR VALLEY, GLAMORGANSHIRE.—We are given to understand that Capt. Lewis, of Llanfair, near Llandovery, through the able superintendence of Mr. W. T. Lewis, mineral surveyor, Aberaman Ironworks, has just opened a colliery on Gelligall estate, the property of Crawshaw Bailey, Esq., M.P. The opening is made on that precious vein of bituminous coal, known as No. 3 vein, and it seems without the least doubt that it will turn out a very profitable undertaking, the coal being from 3 ft. to 3 ft. 4 in. in thickness, and of excellent quality, the roof being also of a very stiff nature, being composed of a mixture of clay and rock, generally known by the name of "cliffquar." This opening can be extended through Mr. Bailey's property, all the way from Rhondda Fawr to Rhondda Fach rivers, commanding thereby upwards of 500 acres of the said No. 3 vein of coal. On Saturday last the first wagon load of the coal was let down the inclined plane from the level's mouth, which was hailed as a first, great, and good commencement of traffic on the Taff Vale Rhondda Fawr Branch Extension Railway.—*Merthyr Guardian*.

CORNISH MINERS.—You will see, as you saw in the market-place at Truro, a marked difference between miners and field labourers. The intelligence gleaming in their eyes, and the general expression, denote a habit of thinking for themselves, as you will find that their shrewd remarks, if you get into talk with them. In daily conflict with rude circumstances, their native resources are developed and multiplied. Their ingenuity is manifest in the numerous improvements they have made in their tools and machinery. They will pierce a shaft in two or three different divisions—one party working from the surface, another from one of the uppermost galleries, and a third from the deeper workings; and when complete, the several portions of the shaft shall all meet in a true perpendicular. Their risks are great. According to Dr. Barham, one-half of the miners die of consumption, between the ages of 35 and 50. Some are killed every year by falling from the ladders in their ascent or descent, and numbers maimed by the daily blastings, in which the county explodes 300 tons of gunpowder annually. In Gwennap the deaths by violence are one in five.—*Londonderry's Walk to the Land's End*.

MADAME TISSANDER'S EXHIBITION.—Notwithstanding the late unfavourable state of the weather, this most excellent exhibition continues crowded, more particularly during the evening, no doubt in consequence of the admirable mode in which the lighting and musical departments are managed and conducted. Many novelties are, we understand, in progress, and will soon be ready for public inspection.

DIRECTOR.—A GENTLEMAN OF POSITION is REQUIRED, to JOIN FIVE OTHERS, who have already consented to act as DIRECTORS of a most promising MINE, the necessary capital for which has already been subscribed, and which is to be carried out under the new Bill for Limited Liability.—Address, "A. A. A.," Mining Journal office, 26, Fleet-street, London.

WANTED.—A PERSON of considerable practice in mining is in WANT of a SITUATION as SUPERINTENDENT, either in COAL, LEAD, or COPPER WORKS.—Address, "B. B.," Post-office, Gloucester.

WANTED, a SITUATION as ROLL TURNER, by a person who has had considerable experience and management in some of the largest ironworks in England. No objection to going abroad. References given if required.—Address, "J. H.," Mining Journal office, 26, Fleet-street, London.

WANTED.—ESTIMATES for a CONDENSING PUMPING BEAM ENGINE, 60 to 66 in. cylinder, to be erected and put into working order at Crick.—For particulars, apply to Mr. JAMES ELCE, mine agent, Crick, near Belper, Derbyshire.

WANTED.—A MINE AGENT, for extensive LEAD MINES in NORTH AMERICA. The location is populous and very healthy, and the situation one of importance and responsibility. Salary, £300 per annum. The applicant must have been chief manager of a lead mine, where not less than 200 persons have been employed; and from experience and ability be able to produce the most unexceptionable references. Age, from 35 to 45 years.—Address, THOMAS HAKES, Esq., 1, Norfolk Villas, Baywater, London.

WANTED, by a GENTLEMAN possessing a most valuable connection in South Staffordshire, and who is daily calling upon consumers, COMMISSIONS for the SALE of IRONSTONE, ROPES, HEMP, STEEL, OIL, and GREASE.—Address, with all particulars, "408," Post-office, Birmingham.

WANTED TO TAKE, a LEASE of a good TIN or COPPER MINE, and also a LEAD MINE, situate in any well-known district in Cornwall or Devon. Owners of such property are requested to send full particulars of same, addressed "Metal," care of Thomas, Davies, and Co., Advertising Office, 1, Finch-lane, Cornhill, London.

GAS MANAGER WANTED.—WANTED, by the WAISALL IMPROVEMENT COMMISSIONERS, a MANAGER for their GAS WORKS, to enter upon the situation in November next. He will have the entire management of the works, to take the meters, keep the books, and make out the accounts, but not collect them. The salary will be £130 a year, with house and office rent and tax free, and coals and gas also free. Applications and testimonials to be sent to the Commissioners' Clerk's Office, Bridge-street, Walsall, by or before Two o'clock in the afternoon of Wednesday, the 31st day of October inst. Any candidate canvassing the commissioners will be disqualified. Candidates with whom the commissioners may wish to have interviews will afterwards be written to. Walsall, Oct. 16, 1855. SAMUEL WILKINSON, Jun., Commissioners' Clerk.

TO LEAD SMELTERS.—A GENTLEMAN, conversant with smelting silver-lead and silver ores, is desirous of obtaining the MANAGEMENT of a LEAD and SILVER SMELTING WORKS.—Address, "A. B.," care of Mr. Thos. Catherall, Eastgate-street-row, Chester.

TO FOREMEN, &c., OF SLATE QUARRIES.—WANTED, in Devonshire, a STEADY, CLEVER FOREMAN, to superintend the raising of the slabs, and overlook the splitters and trimmers, and to enter sales, &c.; liberal wages will be given, and reference as to character and ability required. A FEW good HANDS as SPLITTERS and TRIMMERS also WANTED in the same quarry.—Apply by letter, post paid, addressed "A. B.," care of Mr. Wm. Thomas, 4, High-street, Crediton.

TO CAPITALISTS AND OTHERS.—A GENTLEMAN of limited capital, having secured an exceedingly advantageous contract for the purchase of a valuable mineral property, wishes for the CO-OPERATION of ONE or TWO GENTLEMEN of business habits, having the command of £3000 or £4000.—Apply, by letter, to "X. Y. Z.," Messrs. Partridge and Cozens, 192, Fleet-street.

TO COKE BURNERS, RAILWAY COMPANIES, &c.—DEVY'S NEW PATENT COKE OVENS.—These ovens, built entirely on a new principle, will MANUFACTURE COKE in a QUARTER of the TIME usually required, and will yield from 10 to 15 per cent. more than other ovens. By these ovens, which are also SELF SMOKE CONSUMING, coke is manufactured in 24 hours, with a produce of 75 to 80 per cent., and is purer than any other coke. For further particulars, apply to Mr. A. Devy, patentee, 10, Old Jewry Chambers, where models and plans can be seen.

MR. JOHN CALVERT continues to SURVEY and WORK MINES, Abroad or in England; and, from his lengthened experience as a MINING GEOLOGIST and ASSAYER, is competent to estimate the correct value of any mine, vein, or ore, in any part of the world.—Address, 189, Strand.

MAP OF MINES IN CORNWALL.—The SUBSCRIBERS to the MAP of the WEST CORNWALL MINING DISTRICT are respectfully informed that they will be SUPPLIED in a FEW DAYS, as soon as the colouring and mounting are completed. Gentlemen in and near London, or having agents in London, who are desirous of having copies, but who have not given their names, will oblige by doing so immediately, that the whole may be supplied next week. Truro, Oct. 16, 1855. R. SYMONS.

MAP OF MINES IN TAVISTOCK, CALLINGTON, AND LISKEARD DISTRICTS.—Mr. R. SYMONS respectfully informs gentlemen connected with the mines between Bodmin (in Cornwall) and Bottle Mill (in Devon), that the MAP will be PUBLISHED SHORTLY. Price to subscribers, £2 2s., Coloured and Mounted.—Truro, Oct. 16, 1855.

NICKEL SPISE TO BE SOLD, BY TENDER, AT THE IMPERIAL SILVER SMELTING WORKS AT JOACHIMSTHAL, IN BOHEMIA.—148 cwts. 14 lbs. of REFINED NICKEL SPISE, containing 35½ per cent. nickel, and 9½ per cent. cobalt, are TO BE SOLD BY TENDER, to be made by sealed letter, at the Presidential Office of the Imperial Ministry of Finance at Vienna, not later than Noon on the 1st December, 1855. The conditions of sale can be obtained by applying to Messrs. AUGUST FABER and Co., 60, Mark-lane, London.

NICKEL AND COBALT SPISE TO BE SOLD, BY TENDER, AT THE IMPERIAL COPPER SMELTING WORKS AT SCHMOELLNITZ, IN HUNGARY.—109 cwts. 60 lbs. of SPISE, containing 21 per cent. nickel, and 16½ per cent. cobalt, are TO BE SOLD BY TENDER, to be made by sealed letter, at the Presidential Office of the Imperial Ministry of Finance at Vienna, not later than Noon on the 1st December, 1855. The conditions of sale can be obtained on applying to Messrs. AUGUST FABER and Co., 60, Mark-lane, London.

ASBESTOS OR AMIANTHUS.—PURCHASERS of this mineral substance can have SAMPLES FORWARDED on application to J. J. GEMMOS, St. Austell, Cornwall.—Sept. 20, 1855.

VALUABLE MINERALS IN THE SWANSEA VALLEY.—TO BE LET, 130 acres of ANTHRACITE COAL and MINE, situate 15 miles from Swansea, and one mile from the Swansea Canal, consisting of the Pennypines Mine, the Cae Shon Wille Coal and Mine, the Four Feet Seam, the Nine Feet Seam, the Brass Seam, and numerous beds of mine, workable by sponge or separately. The above are situated under the same adjoining lands and neighbourhood.—Apply to Mr. W. P. STAVES, civil engineer, Swansea.

COAL.—TO BE DISPOSED OF, a FOURTH SHARE in a prospectors COLLIERY in the SOUTH YORKSHIRE COAL FIELD, where a capital of about £3000 is required.—Further particulars may be obtained on application to Mr. HALL, 125, High-street, Redcar, and Milnthorpe House, Wakefield; or Mr. HARRISON, colliery viewer, Barnsley.

STATIONARY STEAM-ENGINES OF THE BEST QUALITY, from 1 to 50-horse power, fitted with VARIABLE EXPANSION GEAR. These engines, which have been designed to combine great simplicity of parts with the utmost economy of action, are supplied with or without boilers, at the lowest possible rates; and erected, if required, in any part of the kingdom. General boiler and tank work carefully executed upon advantageous terms.—Apply to Messrs. WILLIAM YOUNG and Co., engineers, Barnsley.

TO THE COAL AND IRONMASTERS OF GREAT BRITAIN.—WHITE AND GRANT'S PATENT SAFETY CAGES, DALMARNOCK FOUNDRY, GLANGOW.—The recent IMPROVEMENTS made upon the PATENT SAFETY CAGE, make it highly advisable for all coal and ironmasters to adopt them. Since the first introduction of this valuable invention, upwards of 100 lives have been saved, which otherwise would have been sacrificed by ropes breaking and over-winding. The Government Inspectors having also highly approved of them, it is very desirable that every colliery owner should have this inestimable safeguard placed on all their cages, thereby preventing a constant risk of loss of lives, with expensive and endless lawsuits. Having been appointed SOLE AGENT for the PATENT SAFETY CAGES, I will make an early circuit among all colliery owners and ironmasters, for the purpose of giving information and receiving orders. JAMES JENKINS, 27, Ronald-street, Glasgow.

TAMAR SILVER-LEAD MINING COMPANY.—Notice is hereby given, that the ADJOURNED ANNUAL GENERAL MEETING of the shareholders in this company will be HELD at their offices, No. 17, Gresham-street East, London, on Monday, the 29th day of October inst., at Two o'clock precisely; and that the accounts to be presented to the meeting, with the vouchers, are open at the offices of the company for inspection between the hours of Eleven and Three daily.

By order of the Board, P. GEORGE, Sec.

Dated this 16th day of October, 1855.

WHEAL UNY.—At a QUARTERLY GENERAL MEETING of the adventurers in Wheal Uny, held at No. 69, Lombard-street, London, on Tuesday, the 16th October, 1855.

PHILIP L. HINDS, Esq., in the chair.

The following resolutions were severally moved, seconded, and carried unanimously: That the statement of accounts, together with Capt. Rowe's report, be received and adopted, and that they be printed and circulated among the adventurers. That a call of £1 per share, payable in 14 days, be, and the same is hereby declared to be, made upon the adventurers.

That P. L. Hinds, William Munt, and John Spalding, Esqrs., and Dr. Kennedy, be re-appointed the committee of management for the next three months. That the thanks of the meeting be presented to P. L. Hinds, Esq., for his courteous conduct in the chair this day; and to the committee generally, for the very able and efficient manner in which they have conducted the working of the mine during the past three months.

JAMES HURTY, Sec.

Statutes of Cornwall.—In the Parish of St. Austell, in the County of Cornwall, in the CONSOLIDATED CAUSES of the late Capt. Nich. Grenfell, deceased, to SUBMIT FOR SALE, BY PUBLIC AUCTION, at the Three Tuns Hotel, Penzance, on Thursday, the 26th day of October inst., at Eleven o'clock in the forenoon, FIVE (5) SHARES in that valuable and productive tin mine in St. Just, called BOSCAWEN, and TWO SHARES in the PENZANCE SHIPPING COMPANY.—For further particulars, apply at the offices of Messrs. MILLET and BORLASE, solicitors, Penzance. Dated Penzance, Sept. 29, 1855.

NOTICE IS HEREBY GIVEN, that, pursuant to FOUR several ORDERS, or DECREES, made in these Causes, and bearing date respectively the 14th day of February last, a PUBLIC AUCTION will be HELD at POLZEATH CONSOLES MINE, in the parish of St. Minver, within the said Stannaries, on Thursday, the 25th day of October inst., at Eleven o'clock in the forenoon, for SELLING, either together or in lots, the undermentioned MINING MACHINERY, MATERIALS, and OTHER EFFECTS, viz.:

- | | |
|---|---|
| 1 17 in. cylinder double-acting steam-engine. | 2 doorpieces, H-pieces, pole stocking, stuffs-boxes and glands. |
| 1 boiler. | 1 9 ft. 6 in. working. |
| 3 whims, shieves, and shaft tackles. | 1 6 ft. 7 in. doorpiece. |
| 1 shears and shieves. | 220 fms. 1½ in. round iron rods. |
| 40 fms. 6 in. whim-rope. | 1 bob and stands at the west shaft. |
| 17 9 ft. 9 in. pumps. | 1 travelling bob. |
| 2 6 ft. 9 in. doorpieces. | 1 bob at the engine. |
| 3 6 ft. 8 in. doorpieces. | 1 bob at the north shaft. |
| 2 9 ft. 9 in. windbores. | 20 fms. 1½ in. windbores. |
| 2 9 ft. 8 in. workings. | 3 pieces 6 in. wood rod. |
| 9 9 ft. 10 in. pumps. | New and old iron rod-plates, bolts, bars, and rod from set off. |
| 3 9 ft. 9 in. pumps. | 32 fms. 9 in. wood rods. |
| 1 6 ft. 9 in. windbore. | Iron bucket, rod, and chain ladder. |
| 1 plunger-case. | 30 fms. of casing and dividings. |
| 6 9 ft. 7 in. pumps. | |

1 capstan, capstan-rope, 1 36 in. smiths' bellows, vice, taps and plates, anvil, screw stocks, timber house, carpenters' bench, box, old and new air-pipes, 3 24 gallon water-barrels, small powder house, house water lift, sundry whins kibbles, miners' tools, &c. Account-house furniture, and a variety of other materials and effects in general use in mines.—For viewing the same, application may be made to the officer of the Court in possession; and for further particulars, to Mr. CHILCOTT, solicitor, Truro.—Dated Registrar's Office, Oct. 10, 1855.

SHARES IN BOSCAWEN TIN MINE, ST. JUST, IN PENWITH, CORNWALL.

MR. BELLINGER has been instructed by the Trustees of the estate and effects of the late Capt. Nich. Grenfell, deceased, to SUBMIT FOR SALE, BY PUBLIC AUCTION, at the Three Tuns Hotel, Penzance, on Thursday, the 26th day of October inst., at Three o'clock in the afternoon, FIVE (5) SHARES in that valuable and productive tin mine in St. Just, called BOSCAWEN, and TWO SHARES in the PENZANCE SHIPPING COMPANY.—For further particulars, apply at the offices of Messrs. MILLET and BORLASE, solicitors, Penzance. Dated Penzance, Sept. 29, 1855.

MINE SHARES, AND MINE SETT NEAR TAVISTOCK, FOR SALE.

MESSRS. DAVIS, SON, AND VOSPER WILL SELL, BY AUCTION, at the Bedford Hotel, Tavistock, Devon, on Monday, the 29th October inst., at Four o'clock p.m., TWELVE (12) SHARES in the very promising mine called WHEAL FRANK, situate near Horrabridge; and ONE-HALF of the INTEREST granted by the SETT of John P. Bastard, Esq., in the promising tin mine called the GOLDEN DAGGER, situate near Post Bridge, on Dartmoor. Further particulars may be known on application to Mr. Hooson, solicitor, Exeter.

EXCELLENT MINING MACHINERY AND MATERIALS FOR SALE, BY AUCTION.

MR. GUMMOE is favoured with instructions to SELL, BY AUCTION, at WHEAL UNY, in the parish of Gwinear, in the county of Cornwall, on Tuesday, the 30th of October inst., and following day, the WHOLE of the valuable MACHINERY and MATERIALS thereon, consisting of a 6½ in. cylinder PUMPING ENGINE, 10 ft. stroke in the cylinder, and 7 ft. 9 in. in the shaft, with two boilers 22 tons; a 24 in. cylinder stamping engine, with one boiler 10 tons, and 12 heads of stamps, complete; a calciner complete, with 12 ft. bed, and worked by a water-wheel.

12 fms. 11 in. drawing lift. 200 fms. ladders.

10 fms. 15 in. drawing lift. 150 fms. tramroad iron and saddles.

30 fms. 17 in. plunger lift, complete. 200 fms. ladders, of various sizes.

43 fms. 16 in. plunger lift, complete. 130 fms. 15 in. capstan-rope.

10 fms. 16 in. pumps. 180 fms. 14 in. capstan-rope.

1 18 in. 4½ ft. pump. 50 fms. 2½ in. pump rods.

1 new 16 in. doorpiece. 140 fms. 1½ in. chains.

70 fms. 14 in. main rods. 300 fms. 7-16ths chain.

120 fms. air pipes.

Capstan and shears; cathead; east-iron shaft for stamps, with bearings; brasses and stools to match; east-iron crochets wheel for ditto; cast iron 4 ft. crank for ditto;

4 whims; whim and winze kibbles; 32 fagotted rod plates; bucket rods and prongs; rod and flange pins; bolts and bars; set-offs; staples and glands; pump rings; 40 in. smiths' bellows; 36 in. ditto; smiths and miners' tools; anvils, vice, screw stock and gear; taps and plates; new and old iron; mandril; hand-screw; 4 brass shute blocks; 3 iron tram wagons; saddles and brasses; air-pump bucket; hercules; balance bob; 3 beams, scales and weights; elsters; pulleys and stands; shaft tackles; grease; oil; nails; junk; hand and wheelbarrows; kieves; racks and buckle; dressing tools of every description; sheds; a lot of bricks; grinding-stone; smiths and miners' chests; carpenters' benches; a quantity of timber and plank; and a great variety of other things.

The whole of the machinery and materials are of the best quality, the greater portion having been very recently purchased new.

The sale will commence on each day at Ten o'clock.

For viewing the same, apply to the agents, on the mine; and for further information to Capt. J. GUMMOE, at Camborne; or to the auctioneer, at his offices, St. Austell, of whom catalogues can be obtained at 6d. each, to be returned to purchasers.

Dated Imperial Fire and Life, and National Life Insurance Offices, St. Austell, Oct. 15, 1855.

TO IRONMASTERS AND OTHERS.

IMPORTANT SALE OF FREEHOLD IRONWORKS AND PLANT, AT GREYS' GREEN, WEST BROMWICH.

MR. THOMAS DANKS WILL SELL, BY AUCTION, on Monday, the 5th day of November, 1855 (by order of the trustees of Mr. Thos. Payne, at the Dudley's Arms Hotel, in Dudley, at Five for Six o'clock in the afternoon, all the FREEHOLD IRONWORKS and PLANT, situated at GREYS' GREEN, in the parish of West Bromwich, Staffordshire, and which are fully described in the particulars.—Further particulars may be obtained on application to H. CONKE, Esq., solicitor, Stourbridge; G. JARRET, Esq., Messrs. GEAR, DOCKER, and STILES, and Wm. COTTELL, Esq., solicitors, Birmingham; or to the auctioneer, Dudley.

GLAMORGANSHIRE.—VALUABLE MINERAL PROPERTY.

MR. THOMAS GLOVER WILL SELL, BY AUCTION, at the Castle Hotel, Swansea, on Saturday, the 27th day of October, 1855, One o'clock in the afternoon, in lots, all those COLLIERIES, and also all the MINES, VEINS, and SEAMS OF COAL and CULM, as well opened as unopened, in, upon, and under the several farms and lands situate in the several parishes hereinafter mentioned:

IN THE PARISH OF LLANGYFELACH.

Lot 1. PENTREPOTH, TAVENYBERTH, and TYFENRY

LEE STEVENS'S PATENT FURNACES comprise an established **SYSTEM OF SMOKE PREVENTION AND ECONOMY OF FUEL**, for all manufacturing purposes, from the smallest pan to the largest copper or boiler; and is remarkable for simplicity, cheapness, and facility of adaptation. Average saving of fuel, 20 per cent. Drawings of hundreds of furnaces in successful operation, testimonials, official reports, &c., may be seen at 1, Fish-street-lane, City.

OVERLAND ROUTE.—STEAM TO INDIA AND CHINA, &c.
 VIA EGYPT.—THE PENINSULAR AND ORIENTAL STEAM NAVIGATION
 COMPANY BOOK PASSENGERS AND RECEIVE GOODS AND PARCELS for the
 MEDITERRANEAN, EGYPT, ALEN, BOMBAY, CEYLON, MADRAS, and CAL-
 CUTTA, by their mail packets leaving Southampton on the 4th and 20th of every
 month; and for INDIA and CHINA, by those of the 12th and 26th of the same
 month; and for PARTICULARS apply at the Company's Office, No. 122, Leadenhall-street,
 London; and Oriental-place, Southampton.

PATENT SAFETY FUSE.—THE GREAT EXHIBITION PRIZE MEDAL WAS AWARDED TO THE MANUFACTURERS OF THE ORIGINAL SAFETY FUSE, **BICKFOLD, SMITH, DAVEY AND PRYOR**, for their Explosive Merchants, Mine Agents, Railway Contractors, and all persons engaged in Blasting Operations, that, for the purpose of protecting the public in the use of a genuine article, the **PATENT SAFETY FUSE** has now a thread wrought into its center, which, being patent tested, infallibly distinguishes it from all imitations, and ensures the continuity of the gunpowder.

This Fuse, created by a Second Patent, is manufactured by greatly improved machinery, and may be had of any length and size, and adapted to every climate.

Address, —**BICKFOLD, SMITH, DAVEY, and PRYOR**, Tuckingmill, Cornwall.

SAFETY FUSE.—Messrs. WILLIAM BRUNTON and CO., PEN-
SALLICK, near REDBUTH, CORNWALL, MANUFACTURERS OF FUSE,
of every size and length, as exhibited in the Great Exhibition of 1851, and supplied to
the Royal Arsenal at Woolwich, the Arctic Expedition, and every part of the globe.
Messrs. BRUNTON & CO. are at all times PREPARED TO EXECUTE UNLIMITED
ORDERS for SUPPLYING FUSE direct from their own MANUFACTORY, upon
warrant that it will prove equal to, if not better, than any to be procured elsewhere.

PATENT IMPROVED WIRE ROPE WORKS, MILLWALL,
POPELAR—A. J. HUTCHINGS, and CO., Sole Managers to the *Lords of*
 Admiralty, ROYAL FLEET ROYAL COAST GUARD, and all other Government
 operations or other purposes, GALVANIZED or UNGALVANIZED, MANUFACTURED upon an IMPROVED PRINCIPLE, ensuring great pliability and durability.
 The superiority of these ropes over hepen ones, in point of strength, lightness, durability, and cost, is admitted by all who have tried them.
GUTHRIE, HENDERSON & CO., GALVANIZERS, LIGHTNING CONDUCTORS, &c.,
 10, FRANKLIN STREET, EDINBURGH.

IMPROVED PATENT WIRE ROPE.—**MR. ANDREW SMITH**, the ORIGINAL INVENTOR OF WIRE ROPE, LIGHTNING CONDUCTORS and SUBMARINE TELEGRAPHS, solicits the attention of the public to his **IMPROVED PATENT MANUFACTURE**, as the best and cheapest, having obtained his sixth patent since 1835.—Office, 69, Princess-street, Leicester-square, London. *46*

HENRY J. MORTON AND CO'S (No. 2, BASINGHALL BUILDINGS, LEEDS) PATENT WIRE ROPES, for the use of MINES, COLLIERIES, RAILWAYS, &c.; one-half the weight of hemp rope, and one-third the cost; one-third the weight of chains, and one-half the cost—in all deep mines these advantages are self-evident. References to most of the principal colliery owners in the kingdom.

GALVANISED SIGNAL CORDS AND KNOCKER LINES: will not rust or *146*

rod, and not affected by the copper water in mines. Very strong, and not at all liable to break. Prices from 13s. per 100 yards.

PATENT ASPHALTED ROOFING FELTS, 1d. per foot.

DRY HAIR BOILER FELTS, to SAVE COAL.

PATENT BOILER COMPOUND, for bad water.

FAIRBANK'S WEIGHING MACHINES, of all sizes.

GALVANISED IRON ROOFING AND SPOUTING.

MILNIN'S FIRE-PROOF RAFFS,
STOCK OF MINING and RAILWAY STORES in Liverpool and London:—viz.,
OILS, GREASES, COTTON WASTE, SPUN YARN, WHITE LEAD, VARNISHES
&c.; and at very low prices.—Address, 2, Basinghall Buildings, Leeds.
SOLE AGENTS for Prof. GLUKMAN'S ELECTRIC SIGNAL from RAILWAY
GUARD to ENGINE DRIVER, and also for the use of COLLIERIES and MINES,
N.B. Illustrated price list on application.

MORTON'S PATENT WIRE ROPES.—HENRY J. MORTON
AND CO., GALVANISED IRON ROOFING AND SPOUTING WORKS
2, EASINGHALL BUILDINGS, LEEDS.
IMPROVED PATENT WIRE ROPES, for MINES, COLLIERIES, RAILWAYS
&c. References to all the large colliery owners in the kingdom. One-half the cost
of hemp or chain, more durable, and ONE-THIRD THE WEIGHT OF CHAIN—very important
advantages for deep mines.

FAIRBANK'S IMPROVED PATENT WEIGHING MACHINES
for use of **IRONWORKS, COLLIERIES, RAILWAYS, WAREHOUSES**
STORES, &c. The most **ACCURATE MACHINES** in use, and the **cheapest.**
MACHINES of all sizes, from **1 cwt. to 30 tons**, for **RAILWAY WAGONS, CARTS**
or WAGONS.—For prices and all other information, apply to **HENRY J. MOURON** and
Co., Galvanized Ironworks, 2, Basinghall-buildings, Leeds.
Asphalted Roofing Felts, Boiler Felts, Galvanized Iron, &c., in Stock.

CHEAP, LIGHT, AND DURABLE ROOFING, ONE PENNY PER FOOT.—HENRY J. MORTON AND CO., 2, BASINGHALL BUILDINGS, LEEDS. PATENT ASPHALTED ROOFING FELTS, for roofing sheds, contractors' cottages, ore-dressing sheds, brick and tile sheds, and all agricultural purposes. One penny per square foot. The cheapest roofing manufactured. Stocks kept in London, Leeds, and Bristol. **DRY HAIR BOILER FELTS**, for saving fuel.

H. J. MORTON AND CO., 2, Basinghall-buildings, Leeds.

212° MILNERS' HOLDFAST AND FIRE-RESISTING SAFES
(non-conducting and vapourising), with all their improvements, under
their Quadruple Patents of 1849-51-54 and 1855, including their GUNPOWDER
PROOF SOLID LOCK AND DOOR (without which no safe is secure). THE
STRONGEST, BEST, AND CHEAPEST SAFEGUARDS EXTANT.
MILNERS' PHENIX (212°) SAFE WORKS, LIVERPOOL, the most complete
and extensive in the world. Show Rooms, 6 and 8, Lord-street, Liverpool. London,
Depot, 47A, Moorgate-street, City. Circulars free by post. 1894

GAS PURIFICATION OF GAS.—This process is APPROVED AND ADOPTED by some of the most intelligent men in the kingdom, and their opinions are fully borne out by the investigations of Leeds and other scientific authorities. It will, no doubt, be employed in nearly every gas-managed gas-works; and will lead to an enlarged consumption of gas in private houses, from which it is now excluded by a fear of its impurity.—Terms of licence &c., may be obtained of Messrs. HOLMES BROTHERS, Huddersfield, agents to the patentees in connection with gas-works of Leeds, Preston, Huddersfield, Wakefield, &c.
Riding County Gas Co., &c.

IMPROVED LIFTING JACKS,
MANUFACTURED BY
W. AND J. GALLOWAY,

**PATENT RIVET WORKS,
MANCHESTER.**

The attention of parties who employ

Filling Gears



Is respectfully requested to the su-
periority of those annexed, over those
hitherto in use.

NOTICE TO RAILWAY AND STEAM-BOAT TRAVELLERS
FOR THE USE OF THE GREAT BRITISH RAILWAY COMPANY.

—ANDERSON'S HOTEL, 162, 164, and 165, PINE STREET, BOSTON.
PAST, with joint, 1s. 6d. BEDS, 10s. 6d. per week. Dinner, Twelve shillings.
Joint and vegetable soup or fish, 2s. TURTLE SOUP and
VENISON daily. TABLE D'HÔTE at Half-past One and Half-past Five at Two
shillings each. A night porter in attendance.

DR. DE ROOS' CELEBRATED GUTTÆ VITÆ, OR LIP DROPS, are the great European remedy for Spermatorrhœa, Exhaustion, Nervousness, Debility, Incapacity for Society, Study, or Business, Shaking of the Hands and Limbs, Indigestion, Flatulency, Shortness of Breath, Consumptive Haemorrhages, Sight-Weakness, Ringing in the Head, Vertigo, Dropsy, Swelling of the Throat, Pains in the Bones and Joints, Scrophulous Serofulas, and all those diseases for which mercury, arsenic, and iodo-potash, &c., are not only employed in vain, but too often to the utter destruction of the sufferer's health. Their almost marvellous powers must be felt to be believed. HARRIS

drops of apparently powerless cases, which had been given up by the faculty, have been speedily cured, and many thousands have derived almost miraculous relief, when every other thing else had signally failed.

Price 11s., and four times the quantity 33s. per bottle, obtainable through all medicine vendors; of whom also may be had the "Medical Adviser," 2s. 6d. in scaled envelopes, or it may be sent direct from the Author for 42 penny stamps.

Advice and medicines sent to any address free of postage, on receipt of a full payment of the case and the usual fee of £1. Post-office orders payable at the Bank of England, or by Cash, may be sent to Messrs. J. & W. B. Williams, 11, Abchurch Lane, London, E.C. 4.

HOLLOWAY'S OINTMENT AND PILLS HAVE CURED AN ULCERATED ARM.
—Mr. Robert Gregg, jun., of Cerkelsland, Clowes, Ireland, was sorely afflicted with a severe gathering in his arm pit, which discharged very copiously for nearly five years; another wound also broke out in his shoulder. His father felt that he had

ing consulted the most eminent surgeons to no purpose. The "old bones" were
waste away. At this juncture, a friend advised a trial of Holloway's Pills and Oint-
ment, which was made, and in six weeks they perfectly cured him. He is now get-
ting fat and hale, and, in his own expression, as strong as a horse.—Sold by all
druggists; and at Professor Holloway's establishments, 244, Strand, London; and
80, Maiden-lane, New York.

Sizes.	Yd.	Last Price	Present
--------	-----	------------	---------

The

P. B. W.
W. B. B.
T. B. B.
J. F. B.
F. E. B.
E. C. B.
Perc
W. C.

M
TEL, n

M
both in
DIVI
ing from
MINES
Mr. C
Bedford
Ivbridge
Wheel E
Wheel K

M
and St.
and is p
Oct. 2

M
DIVIDE
10 Alfre
1 Whe
1 South
10 Nor
10 Whe
10 Carn
20 Whe
PURCH
BURANO
To thos
be affor
100 Per
Mr. Ba
prices, on
CIRCULA

M
oc
burs, Co
COMMON
AGENT, A
The past
and an ex
enable him
The pres
where a co
Mr. Per
chase and
shall be p

M
DI
from 64, O
Monsr.
150 DIVI
strongly re
Monsr.
qualified to

G
GEOR
that
10 Grats V
20 Leads T
2 Cradock
100 South
30 Wheel
15 Wheel
100 West C
3 Rosewa
100 T
7 Gonama
50 Fedn. an
2, Wine

M
R. B
OLD
million of
Mr. SHARP
100 Althoug
2 Mortgage
100 Cwn De
20 South Z
20 Fort Boy
20 North H
100 North H
55 Lady Be
120 South B
20 Wheel G
100 Grats S
Mr. SHARP
23 East Wh
100 East Gu
Mr. H. G.
the dividend
formation for

J
JAMES
EKCH
quoted in the
capitalist who
variable oppo
from 10 to 25
deliciously sel
present depen
Holders of a
sive to divide
possible term
N. B. A no
J. F. Bony
man, on recit
WANTED.
Wardridge Co
Shen, Lady E
A correct li
personally or
Black 2000
LMS. 28, 1846

M
MIN
in vosto
of much, has
in daily comm
means of consi
Corwall, and
capitalist, a self
haviour, will en
of a progressive
low, in 1846